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**THE ADVANCEMENT OF INNOVATIONS IN COMMUNICATIONS  
INDUSTRY: A CASE STUDY OF RUSSIAN POST COMPANY**

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Evgenii Dzenov, 2015

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77 pages, 42 tables, 16 graphs, 1 appendix

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**Keywords:** advancement of innovations, communications industry, Russian Post, benchmarking, matrix-integral analysis of customer requirements, MS Excel payback period calculation.

The purpose of this study is to provide a project aimed on solving the problem of advancement of innovations for Russian Post company that is the main actor on the Russian postal service market. This project is constructed through gathering and scrutinizing two essential informational packages, with first being precise information about Russian Post business processes and structure in order to find out the weak spots and hindering forces, and the second being benchmarking analysis of product and service portfolio of company's peers in Europe and Australia in order to evaluate existing experience and gather additional sources that can facilitate the advancement of innovations. These informational packages are studied and sent through the matrix analysis that must highlight customer and technical requirements which emphasize the innovativeness and problem-solving purpose of the project and lay stress on the assuring characteristics that must to be met in order to advance the project. The project itself is aimed on providing Russian Post company with several solutions, both managerial and engineering, which are aimed on easing problem-solving processes and lay the foundation for continuous innovation and value increase for Russian Post company, its partners and its customers. Project's payback period is been calculated as well.

## **List of Tables**

- Table 1. Prices for sending domestic letters
- Table 2. Prices for sending maxi letters
- Table 3. Prices for sending domestic parcels
- Table 4. Prices for sending domestic letters
- Table 5. Prices for sending letters.
- Table 6. Prices for sending letters.
- Table 7. Flat fee rates.
- Table 8. Prices for sending letters.
- Table 9. Prices for sending parcels
- Table 10. Prices for sending packages
- Table 11. Russian Post business model - Key parameters
- Table 12. Russian Post business model - Resources
- Table 13. Russian Post business model - Finances
- Table 14. STEEP-analysis
- Table 15. Evaluation of probability of appearance and level of influence
- Table 16. Threat from substitutes
- Table 17. Threat from new entrants
- Table 18. Intensity of competitive rivalry
- Table 19. Bargaining power of customers
- Table 20. Bargaining power of suppliers
- Table 21. STEEP-analysis summary
- Table 22. Data for BCG matrix
- Table 23. Russian Post's strategic business units
- Table 24. SNW-analysis
- Table 25. SWOT-analysis
- Table 26. Gleister matrix
- Table 27. Customer requirements
- Table 28. Assuring characteristics
- Table 29. Correlation of assuring characteristics and customer requirements
- Table 30. Correlative connection between assuring characteristics
- Table 31. Amplitude of interconnections between main customer requirements and correlated assuring characteristics
- Table 32. Evaluation of weight indexes
- Table 33. Evaluation of the priority of assuring characteristics

- Table 34. Russian Post's business card  
Table 35. Gantt diagram  
Table 36. General expenses  
Table 37. Equipment procurement expenses  
Table 38. Direct expenses on installation  
Table 39. Average monthly revenue  
Table 40. Average monthly project expenses  
Table 41. Beaver coefficient  
Table 42. Summary

### **List of Graphs**

- Graph 1. STEEP-analysis  
Graph 2. BCG Matrix  
Graph 3. Kurt Levin's Forces for Russian Post  
Graph 4. Pre-project state  
Graph 5. Post-project state  
Graph 6. Cash Flow  
Graph 7. Net Present Value and Net Present Worth  
Graph 8. Beaver coefficient  
Graph 9. Financial leverage  
Graph 10. Preliminary scheme of an innovative approach  
Graph 11. Tree of objectives  
Graph 12. Gantt Diagram  
Graph 13. Logical view diagram  
Graph 14. Sequence diagram  
Graph 15. Activity diagram  
Graph 16. Server Diagram

## **Acknowledgements**

Dear All,

I would like to thank my LUT supervisors, Ville Ojanen and Kalle Elfvingren for their scrutiny and experience that they put into this thesis and their accurate and well-placed feedback that helped me to increase novelty and accuracy of this project. Secondly, I would like to express my gratitude to Riita Salminen and Juha Väätänen for their unyielding determination which made my studying in LUT possible and provided most helpful guidance that assisted me in acquiring such great share of world-class knowledge of industrial management. Next, I would like to thank all professors and experts of South Ural State University for the energy and genuine interest that they have invested in me during these final and crucial years and helped me to realize the importance of personal and professional competences.

I would also like to thank my colleagues and friends in LUT for the time spent together while studying and during leisure time as well. I couldn't have imagined taking these studies without you and I do hope that we will meet later.

The last but the most important, I would like to thank my family. It is near to impossible to measure the importance of faith, energy and efforts that you, father and mother first and foremost, have unconditionally contributed to me and I meant not only since the beginning of my studies in LUT, but from the very first days of my life.

With the end of these studies, the greatest milestone of my life comes to its end and something new is now bound to begin. Thank you all for making this possible.

Yours sincerely,

Evgenii Dzenov

## TABLE OF CONTENTS

<b>1 INTRODUCTION.....</b>	<b>1</b>
1.1 Research background.....	1
1.2 Research motivation.....	1
1.3 Research problem.....	2
1.4 Research boundaries.....	3
1.5 Thesis structure.....	3
1.6 Key concepts and definitions.....	4
<b>2. THEORETICAL BACKGROUND.....</b>	<b>5</b>
2.1 Advancement of innovations in postal industry.....	5
2.2 Customer-oriented approach.....	7
2.3 Benchmarking study of product and service portfolio.....	8
2.4 Pricing strategy for innovative products and services.....	9
2.5 Matrix-integral analysis of customer requirements and assuring characteristics.....	11
2.6 Investments payback period .....	12
<b>3 RESEARCH PROCESS AND METHODOLOGY.....</b>	<b>13</b>
3.1 External Environment of Russian Post.....	13
3.1.1 Benchmarking of product portfolio of foreign post companies.....	13
3.1.2 Field of problems of Russian Post.....	22
3.1.3 STEEP-analysis.....	23
3.1.4 Michael Porter's Five Forces for Russian Post.....	26
3.1.5 BCG matrix.....	29
3.1.6 Russian Post's strategic business units.....	32
3.2 Internal Environment of Russian Post.....	34
3.2.1 McKinsey's 7S.....	34
3.2.2 SNV-analysis.....	37
3.2.3 SWOT-analysis.....	39
3.2.4 Gleister matrix.....	40
3.3 Matrix-integral analysis of customer requirements and assuring characteristics.....	41
<b>4 DEVELOPMENT OF AN INNOVATIVE PROJECT FOR RUSSIAN POST.....</b>	<b>48</b>
4.1 Hierarchy of goals.....	48
4.2 Kurt Lewin's force fields.....	49
4.3 Russian Post's business card.....	50
4.4 Project Imperatives.....	51

4.5 Gantt diagram.....	54
4.6 Calculation of investments payback period.....	55
<b>5 DISCUSSION OF RESULTS.....</b>	<b>62</b>
<b>6 CONCLUSION.....</b>	<b>66</b>
<b>REFERENCES.....</b>	<b>67</b>
<b>APPENDIX.....</b>	<b>72</b>

## **1 INTRODUCTION**

### **1.1 Research background**

Industry of communications is heavily bound to methods and instruments of transfer of information, which have undergone through serious transformation and modernization within previous 15 years. That process causes serious structural changes of business models in the industry, and from author's point of view Russian Post company can serve as a vivid example of necessity of change in postal industry. In the times of crisis and inevitable harsh competition there must be a support if company's innovative products and services are going to make it to the end user. Without support there is no guarantee that private customers and other companies get any information about company's product or find and understand its attractive and competitive features. Additionally, there are many additional features that define method and potential outcome of that process. These feature relate to specific method chosen to advance the innovation, whether in horizontal way (combining efforts and knowledge derived from several actors), or in vertical way (when action takes place within developing company only). Other scholars point out the importance of chosen form of technology transfer, whether it non-commercial when company spend less financial resources, but instead must use more time and expertise, or if it is commercial form when company sells its innovative concept and related services and competences.

### **1.2 Research motivation**

As a student studying in the department of industrial engineering and management author has found activities that help to understand the foundations and methods used in the process of development of innovative product and services highly beneficial for future career and similar to his area of interest. The main reason to conduct the research and write the thesis in this field was cause by highly interesting and educational cooperation with Finnish Itella Posti company during the study in aforementioned department of Lappeenranta University of Technology. Under the framework of the objective the author and his two colleagues were given a task by Itella Posti, a task to analyze post companies in foreign countries, compare their product and service portfolio with that of Itella Posti and understand what innovative services and products that they implemented provide highest output and ensure their competitive advantage. As the result the author has acquired understanding of the process of benchmarking of technologies and products and once again confirmed that client-oriented approach can be highly efficient

method for identifying potential ways for innovative development of a company. Therefore author as double degree student from Russian university has decided to contribute similarly for the company that operates in Russia (Russian Post) and assist it in filling the research gap in the area of advancement of innovations in communication industry.

### **1.3 Research problem**

The primary research question is: 'What are the ways of innovative development that may be constructed for company 'Russian Post' basing on the benchmarking study of innovative products of foreign post companies?'

The primary research question has been divided into several sub-questions:

1. Why are customer-oriented approach and price determination important in an innovative industry? Addressed by literature review.
2. What elements shape the field of problems of the company "Russian Post"? Addressed by data collection.
3. What project could be efficient implementation of innovative development strategy for the company? Addressed by data collection and case study.
4. What is the expected level of financial stability of a project? Addressed by data collection and analysis.

After a literature review author has found out that the topic of the research has not been fully addressed by implementing analysis and benchmarking study of product portfolio of foreign post companies. Most of the researches attempted not to find the way to adapt foreign products and services to Russia's market, but to develop them from the scratch using foreign data only as guidance. While that way can better correlate with Russia's market, it inevitably requires more resources and often doesn't allow to implement any others competences but competences of the domestic researcher. High price needed to advance an innovation often causes company's superiors to disregard it and stop the whole project in favor of cheaper but less potential alternative. This study attempted to provide a project based on the already tested and successful results of foreign business which can help to contain the final price of innovation on desired levels.

## **1.4 Research boundaries**

Obvious boundary of the research is the orientation towards foreign companies as sources of innovative experience, Itella Posti and others. This leads to the fact that despite efforts for adaptation it could be difficult to provide the suitable analogues for a Russian company without significant modifications which are not presumed to be conducted within the current study. The focus of this study is geared towards obvious and objective features of the Russian Post company and its central customer segment, however author was not hired by Russian Post to do this research so the most sensitive and valuable data was not available. In addition, the author decided not to go beyond the main method of advancement of innovations based on client-oriented approach and benchmarking study of foreign companies' product portfolio. Additionally it must be noted that some analyzing instruments that author used in his work, e.g. matrix analysis, often require (in order to achieve maximal effectiveness) greater number of specialists and consultants that could have been mustered for the work on this thesis, though these instruments can be used by one or two experts and still reach desired effect.

## **1.5 Thesis structure**

After introducing the concept and getting readers along with the context, author proceeds with the literature review in the consequent chapter. The research attempted to dig out most of available information related to aforementioned definitions and thus completing theoretical background. Next author explained used methodology and the process of evidence collection. After that the study showed the analysis of collected data in order to obtain results which are going to be compared with stated objectives in the final part. The conclusion of the research and proposed possibilities for additional work is to be given in the last part.

## **1.6 Key concepts and definitions**

Customer-oriented approach - a number of actions taken by a business to support its sales and service staff in dealing with customer's needs and satisfaction their major priorities + various business strategies that mostly reflect a customer orientation and include the following agendas: development of a quality product appreciated by consumers; prompt and dutiful response to consumers' complaints and queries. [Narver et al, 2000].

Benchmarking study of product and service portfolio - is the practice of a business comparing key components of their products and services aka portfolio to other similar companies in order to become more competitive. [Douglas et al, 2005]

Matrix-integral analysis of customer requirements and assuring characteristics - method of investigating the relationship between business entities through matrix modeling in order to define the most perspective direction for an innovative development. [Topuzov, 2006]

Investments payback period - is a state in which project's financial metrics rise beyond breakeven point and project's payback period promises decent degree of profitability. [Tomashev, 2006]

## **2 THEORETICAL BACKGROUND**

### **2.1 Advancement of innovations in postal industry**

Nowadays the traditional postal business model is challenged by different forces. Players have to deal with growing amount of specific customer needs due to a change in preferences on the senders' and receivers'. Such change in preferences marks clearly the arising demand for modified and diversified products and services. This fundamentally thwarts existing postal business model which is based on large scale activity. Additionally, new technologies, new competitors and substitutes provide customers new options and alternatives. Modern technology allow actors to streamline processes and construct new products services. It is often stressed that competition is the force-major that drives and endorses many recent innovations in postal industry. However, industrial organization theory presumes that innovations' temp would decline with competition because greater competition nullifies monopoly profits that reward innovative newcomers. Therefore, there may be no prime economic effect of competition on innovation promotion but rather a political, biased effect. That trend and the appearance of the potent technologies lead postal companies to rebuilding and investing in innovation. That makes evident the fact that innovation in postal industry is bound to customer needs and activated by technological feasibility. As the result, author noticed that newly formed needs and features along with the appearance of digital and private substitutes bring dangerous challenges to traditional, governmental postal companies. With innovative processes along the value chain and modern services, these new players' prime goal is to satisfy increasingly various customer demands.. As a result, it is necessary to offer an innovative approach and build a project that will contribute to innovative renewal of the enterprise Russian Post. In a highly competitive market, bringing innovation to the consumer requires a lot of support. If innovation do not receive the necessary information and technical support, industry and private customers will not find it at all or find no use in it. In order to claim a competitive advantage, company needs time to bring innovative products to market, and for that managers need to decide what is engaged in the advancement of innovations. In general the process of innovative development includes several participants: R&D body and manufacturer + intermediary organizations dedicated to technology transfer such as state institutes or substructures of big companies or third-party organization that provide consulting and information services.

The cycle of advancement of an innovation consists of three phases:

1. Research - the research and development of new products or services, when innovators explore the possibility of creating a new product, seek means of technical support for the innovation process, and verify its economic viability.
2. Production - acquisition of a technology, unless it was designed by the enterprise itself, preparations for the start of production (financial, material and human resources), market researches and launch of the project.
3. Commercial - launch of networks for distribution and marketing, new market researches and advertising campaigns.

Managers have to remember that there are basically two general methods used to advance an innovation - vertical and horizontal. In the first case the whole innovation process takes place within a single organization whose resources allow to implement all three stages. Horizontal method implies promotion of cooperation and collaboration between research centers, production facilities and third-parties. Therefore, all three cycles can be shared between two or three parties in accordance with their capabilities and competencies. This study will use the experience of foreign companies, which means that the horizontal method of advancement of innovations will be in use in this thesis and project.

Besides, methods of advancement may differ in the forms of technology transfer - noncommercial and commercial. Noncommercial transfer requires lesser financial expenses from a company, but from the other hand, requires more time and other resources. Noncommercial transfer can take form of various publications about innovation in scientific magazines or theses, internship opportunities in innovative enterprises, participation in various seminars and exhibitions. It also may include all kinds of press releases. This helps not only to increase awareness of the public and potential customers, but also helps to create favorable conditions for future development. Commercial form of promoting innovation implies extraction of profit. The easiest way to conduct such a transfer is a sale of technology, intellectual property, copyrights and patents, technical equipment and provision of paid services. For example, introduction of a training program for staff on how to use a new technology. This form is used mostly by small businesses, enterprises with a broad sphere of production or an organization with a high degree of innovative activities. Typically, this is done through personal sales and product presentations. This is one of the most effective methods, because the seller has the opportunity to personally demonstrate the product and describe its

advantages and benefits to customers. In addition, they can get feedback from a potential manufacturer or a consumer of this innovation, establish necessary contacts for further cooperation. In order to advance innovation, managers can also use the services of technology transfer centers.

There are several ways in which cooperation becomes possible with such organizations. The most common and legally-established at the moment - transfer of licenses and know-how's. The most actively developing and perhaps the most important areas of cooperation with technology transfer centers for now is establishment of joint ventures and cooperation with research institutions and industrial enterprises. Often, the lack of awareness serves as a blockade for development and innovation. With transfer centers providing informational support, organizing joint seminars and conferences, parties can use their new connections to advance an innovation and benefit from further fruitful cooperation between R&D, consultants and industry. [Topuzov, 2005]

## **2.2 Customer-oriented approach**

A customer orientation in innovative R&D has long been advocated as a business strategy that leads to greater performance and company's profitability. The idea of a customer orientation has been used alongside with the term 'market orientation' and it has been used as a dimension of a market orientation construct [Narver et al, 2000]. Moreover, customer-oriented approach, with its traditional aim on 'listening' to customers, as its share of critics who cry out the detrimental effects of a customer orientation on organizational processes and performance [Christensen et al, 2005]. For these reasons, the customer orientation construct has been undergoing conceptual debate and empirical validation [Herhausen, 2011].

Additionally, customer orientation is defined as a strategic orientation that reflects the company's ability to build and distribute greater customer value via the processing of market intelligence. This market intelligence includes the acquisition of customer data; the analysis of this data to build customer knowledge; the dissemination of customer knowledge throughout the company; and the planning and coordinating of a company-scale response, such as in solving customer problems or utilizing new customer groups, that is based on the experience from market intelligence. Organizational capabilities which are related to the implementation of a customer orientation are market sensing, customer relating, and customer-response. Market sensing is the ability of the company to identify trends and predict events in the market before

competitors do. This proactive sense is derived from accompany-scale information-process that includes the continuous acquiring of market intelligence, mutual sharing of customer information throughout the company, and the interpretation of that information that creates customer knowledge [Heusinkveld et al, 2009]. That politics reflects the company's ability to develop and maintain close relationships with customers and to ensure ability to share customer information throughout the company so that it can be formed into actual information and knowledge [Day, 2003]. Close relationships are built through more frequent interactions with customers, interactions help the company to develop relational and intellectual resources, such as knowledge of the customers, that allow the company to better predict and adopt most efficient responses to changes in its industry, customer groups, or technology platforms. Customer-response refers to the company's skill to fulfill customer requirements via customer-response expertise [Jayachandran et al, 2004]. These three capabilities ensure that all organizational activities and processes are effectively aimed toward anticipating and responding to dynamic market changes ahead of competitors.

### **2.3 Benchmarking study of product and service portfolio**

There are several different models for conducting benchmarking analysis which are divided in several phases: planning, data collection, analysis, processing. The planning phase states actions what must be completed. It establishes the goal, chooses the data collection methods and selects companies for comparison, it specifies preparations that must be done and identified before beginning of the actual research. Data collection denotes the collection of the information about chosen competitors from independent sources. Analysis stage consist of examination of the collected data. In this stage each company is studied with chosen methods via implementing the collected data. The goal is to analyze performance gaps and find the differences between chosen competitors. Basing on the analysis results researcher can provide suggestions for improvements Processing phase deals with development and implementation of chosen suggestions. It consists of setting new goals based on the result of the analysis and integration of these new imperatives into the target company. Last but not the least is the monitoring phase where results are periodically checked in order confirm success of changes. [Douglas et al, 2005]

Service and product portfolio denotes the company's offering categorized different items into smaller groups with similar features. Portfolio management is the development of crucial choice for business:

- Which markets to enter?
- Which projects to pursue?
- Which technologies should company advance?

Portfolio management is extremely important because it generates three competitive advantages: it helps to develop strategic choices, it helps to foresee how the business will be doing business in the future and it helps to allocate resources more precisely. Portfolio management is driven by influential factors such as financial imperatives of the company to maximize the internal return rate and general effectiveness. [Dzenov et al, 2014]

#### **2.4 Pricing strategy for innovative products and services**

Development of prices for products and services is a multi-step process which is highly important for success in the competition. Price of the product depends on the size of the market and the volume of demand. If the offer is low then pricing strategy can be more flexible, and product features don't bother customers. But when the offer is huge, customers measure the value of product in accordance with its cost. Customers do always compare the cost of various products and services and that means that the price has to be attractive and competitive. [Dzenov et al, 2014]

In this regard, Russian Post follows two fundamental principles for the development of tariffs for universal postal services:

- Tariffs must have sufficiency for funding universal services
- Tariffs must fully reimburse and justify expenses that are necessary for the provision of universal services, including the required level of profitability for the investment

In order to calculate the amount of these costs Russian considers necessary to introduce separate cost accounting of universal services, including:

- Unification: introduction of the same tariffs for each of the categories of written correspondence (postcards, letters, packets, literature for the blind, small packets, ordinary, registered, insured items), for each weight group regardless of the distance

of delivery, place of receiving, delivery location and category consumers (population, business organizations, budgetary organizations)

- Stability: Tariffs for universal postal services must remain stable for considerable period of time
- Predictability: a clear link between the principles and methods of calculation of tariffs
- Transparency: transparent tariff policy, that does not allow discrimination of users.

Russian Post company is a monopoly and for many years it has been able to act as the sole producer of the industry due to the lack of any viable competition. Nowadays company has much weaker position, so it has to worry about losing private customers to private-owned competitors. Therefore, it is not able any longer to set a monopoly price, which is higher than the price that would be in a more competitive industry. There were three main reasons why competitors had difficulties to enter to the market. First reason is that a Russian Post company used to own the most important resources needed to manufacture postal products and services. Second reason is that the government used to allow one company to have the right to produce a certain product or service. A third reason is RP's natural monopoly status which arose from high mass production costs.

To sum up, it should be noted that in postal industry, the state serves as a regulator of the critical elements of company's activity, not only by limiting the power of a natural monopoly, but by preventing excessive competition. Russian post company is also a subject to state regulation conducted order to: protect the economic interests of consumers from unjustified increase of tariffs for telecommunication services; achieve balance of interests between natural monopolies operating in communication industry and their customers; create economic opportunities that reduce the cost of communication services, increase the efficiency of operators, further development and modernization of the equipment and communication networks, expand the market of communication services and improve efficiency; create conditions for attracting investments.

## **2.5 Matrix-integral analysis of customer requirements and assuring characteristics**

Making management decisions on the choice of the innovative project can be represented as a process or algorithm. The purpose of this algorithm - selection of the most cost-effective innovative project achieved consistent implementation of the individual steps. The advantage of the method used integrally-matrix analysis and its difference from the well-known method of quality function is the availability of analytical coefficients of mutual relationships between individual providing consumer requirements, characteristics of the general plan (not just engineering) and the ranked by the consumer characteristics, which also take into account the influence of one characteristics for another. [Topuzov, 2005]

This algorithm is used to select priority projects financing innovative development and management decisions. Information support of the analysis is based on market research market, competitor information, expert opinion, and employees of the organization. Formalized algorithm integrated-matrix analysis allows you to automate the analytical calculation of the interconnection customer requirements and provide performance that improves efficiency. Informational support of the analysis is based on market researches, information about competitors, expert opinions and employees of the organization. Formalized algorithm of an integrated-matrix analysis allowed to automate the analytical calculation of the interconnection between customer requirements and assuring characteristics, therefore achieving the improvement of efficiency. [Topuzov, 2005]

Introduction of variable parameters of the designed object, using the method of integral-matrix analysis provides the following advantages over traditional methods:

- ✓ Establishment of an analytical relationship between expert ballroom estimation of consumer properties and ensuring their performance of the proposed facility
- ✓ Conduction of a correlation analysis of various consumer properties and providing individual characteristics
- ✓ Prioritization of the investments to ensure the implementation of characteristics that satisfy consumer requirements priorities

The resulting algorithm for selecting an innovative project based on matrix analysis is most useful for determining the optimal sequence start projects in resource-limited settings.. Initial data are entered into the appropriate cells, after filling, which are calculated automatically test results, which are presented in tabular form. The overall goal - detection of the conditions

under which probability of successful commercialization of new (modernized) product increases.

## 2.6 Investments payback period

As any, this innovative project must be supplemented by financial resources in order to pass through all stages of growth, successfully mature and return invested money after its decline. In the times of market crisis, the level of uncertainty is high and many factors may cause undesired influence. Prior to starting the project, it is essential to understand whether their projects endures incoming threats and whether invested money return. For that case MS Excel model is necessary. In this thesis, investments payback period is a time period in which the starting cash outflow of project investment is presumed to be replenished by the incoming cash inflows which are generated by the investments. The formulas for calculation of project's payback period in MS Excel are dependent on the cash flow per period from the project: whether it is even or uneven [Carlberg, 2010].

In case they are even, the formula for calculation is: payback period = initial investment/cash inflow per period.

In case they are uneven, the formula for calculation is: payback period =  $a + \frac{b}{c}$

- ✓ a - the last period with a negative cumulative cash flow
- ✓ b - the absolute value of cumulative cash flow at the end of the period A
- ✓ c - the total cash flow during the period after A

Researchers who implement MS Excel model to calculate payback period must remember that [Carlberg, 2010]:

- ✓ It is impossible to calculate payback period if positive cash inflows do not outweigh negative cash outflows in due time.
- ✓ It is possible that there are more than one payback period for a given cash flow stream, since cumulative cash flow may decrease or increase from time to time. If cumulative cash flow is positive during one period, but negative throughout the next, then there might be several breakeven points to consider.
- ✓ Being purely mathematical system, it neither recognizes nor emphasizes the time value of finances and money.
- ✓ Model is able to measure the risk and stability of a project.

### **3 RESEARCH PROCESS AND METHODOLOGY**

For this study author has chosen the qualitative model because it performs very well for analysis of small scale of data. This method is effective when the purpose of the study is to identify the specific pattern following by narrow focus, but not convenient enough for studying general trends. The data is comparatively short in amount, only one company, in this type of study [Trochim, 2001]. The qualitative study provides an opportunity to researcher to actively involve himself with organizational process and to understand the phenomena behind comparisons and confusions [Carcary, 2009]. Benchmarking study of a product portfolio can be decently conducted with the help of a case study. The case study method was used because it gave author an opportunity to make an in-depth analysis of the collected information about particular organization. As the result it became possible to analyze system's details in comparison. The results have been early considered valid and applicable to other studies. Case study is an empirical inquiry that investigates the phenomena behind some practical issues with respect to certain causing factors. By using case study research method, author made an attempt to find out the most potential innovative experience of the foreign companies that could be useful for the development of Russian Post company and for the solving of its identified problems. Moreover, by using case study, the researcher was able to investigate the precise and indeed required information of each system. Another reason to use a case study method is the similar demands that market issued to postal companies in foreign countries in comparison to Russian Post. In both regions postal industry in is facing the biggest change in its history so far. Electronic communication is winning ground and the new law have opened the way to continuous deregulation of the market thus largely assisting small, private competitors of big state-run companies. And in order to issue an effective response to the challenge of digital communication, post companies must develop new, even more versatile solutions for both physical and electronic communication.

### **3.1 External Environment of Russian Post**

#### **3.1.1 Benchmarking of product portfolio**

The following method of the development of a benchmarking study of company's product and service portfolio was tested by Dzenov, E., Nuutilainen, K., Puranen, T. during the cooperation with Itella Posti company in 2014.

#### **Case: Itella Posti**

##### **Domestic letters**

This category is divided to first and second class with price based on weight. Maximum allowed weight for a letter is 2 kg and its dimensions must equal 250 mm x 400 mm x 30 mm. If any dimension exceeds the parameter, a letter it will be considered as maxi letter. The following table shows the prices. [Itella Posti, 2015]

**Table 1. Prices for sending domestic letters, EUR [Itella Posti, 2015]**

<b>Max weight (g)</b>	<b>1<sup>st</sup>class</b>	<b>2<sup>nd</sup>class</b>
50	1,10	1,00
100	1,60	1,40
250	2,20	2,00
500	4,40	4,00
1000	6,60	6,00
2000	11,00	10,00

The maximum allowed size for maxi letters is length + width + thickness equal 900 mm combine with maximum length equal 600 mm. Prices are shown in the following table. [Itella Posti, 2015]

**Table 2. Prices for sending maxi letters, EUR [Itella Posti, 2015]**

Max weight (g)	1 <sup>st</sup> class	2 <sup>nd</sup> class
250	8,30	6,50
500	13,00	10,50
1000	18,50	16,50
2000	37,00	31,00

### **Domestic parcels**

The maximum weight of a parcel must equal 30kg and maximum dimension are 100 cm x 60 cm x 60 cm. Pricing is based on weight. If a parcel's weight is over 10 kg then it is subjected to taxation. Prices are shown in table 3. [Itella Posti, 2015]

**Table 3. Prices for sending domestic parcels, EUR [Itella Posti, 2015]**

Max weight (kg)	Including VAT	Excluding VAT
2		7,90
5		9,30
10		10,50
15	14,00	11,29
30	19,70	15,89

### **E-services**

Netposti is a free electronic alternative for physical mailboxes and file archives. Customer can receive bills through Net Posti and all files are stored for 7 years. Company also offers Well-Wisher's Address Book service that keeps the desired address information up to date. It also sends reminders for all important dates. [Itella Posti, 2015]

The newest e-service is application which turns photos taken by a phone into a postcard. Other apps are Netposti and Posti.mobi which help customers to find postal outlets, letterboxes and drop points. [Posti, 2015]

## **Case: Australian Post**

### **Domestic Letters**

According to current regulations, a letter must suffice the following characteristics:

- ✓ Weight > 500g
- ✓ Contain only flexible items
- ✓ Be of rectangular shape
- ✓ Be no larger than a B4 envelope (260mm x 360mm x 20mm)
- ✓ Be no thicker than 20mm

Prices were converted from AUD to euro using course where 1 AUD = 0.6728 EUR. Price for sending letters in Australia are presented following table. [Australian Post, 2015]

**Table 4.** Prices for sending domestic letters, EUR [Australian Post, 2015]

<b>Letter type, weight (g)</b>	<b>Maximum size (mm)</b>	<b>Price</b>
Small letter, up to 500	130 x 240 x 5	0.40
Large letter, up to 125	260 x 360 x 20	0.81
Large letter, up to 250	260 x 360 x 20	1.20
Large letter, up to 500	260 x 360 x 20	2.00

### **Domestic Parcels**

The charge for small parcels of weight up to 500 g does not depend on distance. Price for a small parcel is 4.67 EUR. Regular parcels weighing over 500 g and up to 22 kg must be paid with basic cost plus distance charge per kg. The basic cost for destinations in the same state is 6.02 EUR and 7.70 EUR for interstate destinations. Distance charges are divided between the biggest cities and different states. Maximum parameters for parcel are: length 105 cm, dimension 0.25 m<sup>3</sup> and weight 22 kg. [Australian Post, 2015]

### **E-services**

Post offers an application for sending parcels online. Customer can pay for service and then drop the parcel to the post office or customer can order a pick up for parcels from the chosen location. It can be used for both domestic and international parcels. The application also tracks the parcels journey. The pickup price starts from 3.70 EUR. For businesses there is a solution

for setting up own online shop. This services helps to create company's own website, assist with selling products or delivering orders through integrated payment services. [Australian Post, 2015]

### **Case: Austrian Post**

#### **Domestic letters**

The price, size and weight restriction are presented in the following table.

**Table 5.** Prices for sending letters, EUR. [Austrian Post, 2015]

<b>Letter type, weight (g)</b>	<b>Maximum Size (mm)</b>	<b>Price</b>
Standard, up to 20	235 x 162 x 5	0.68
Standard Plus, 20 to 50	235 x 162 x 5	1.00
Maxi, up to 500	324 x 229 x 20	1.60
Maxi Plus, up to 1.000	353 x 250 x 24	3.20
Big letter, up to 2.000	L+W+H = 900 , largest dimension = 500	4.00

#### **Domestic parcels**

**Table 6.** Prices for sending letters, EUR. [Austrian Post, 2015]

<b>Weight (kg)</b>	<b>Maximum size (cm)</b>	<b>Price</b>
Up to 2	100x60x60	4.44
Up to 4	100x60x60	5.64
Up to 10	100x60x60	8.39
Austrian road transport toll per parcel - 0.16		
Up to 20	100x60x60	12.91
Up to 31.5	100x60x60	14.96
Austrian road transport toll per parcel - 0.19		

All indicated rates and surcharges for parcels up to 20 kg exclude VAT and for parcels that weight more than 20 kg include VAT. It can be noticed that the size doesn't affect to price if it stays inside the maximum size limits, only weight. [Austrian Post 2015]

Fee for parcels with postage to be paid by the addressee in the table 13 (includes road toll surcharge). There was no more information about these prices in the English version.

**Table 7.** Flat fee rates, EUR. [Austrian Post, 2015]

Weight (kg)	Price
Flat fee up to 10	10.00
Flat fee more than 10	6.00 + VAT

### **E-services**

Austrian Post also offers the service "Meine Marke" which allows customers to create their own stamps. The difference is that images for stamps can be downloaded from PC but also via straight from Facebook or via web-camera. [Austrian Post, 2015]

### **Case: Russian Post**

Russian Post is a state-founded company that operates in Russia and CIS countries since 2002 when all previously existing federal post companies were merged into one. Despite the fact that Russian Post has the least amount of delivered correspondence per property, RP manages to deliver 1,5 bn letters, 1,7 bn magazines and newspapers, 28 mln packages, almost 1 bn of bills and payment checks. While being non-financial institute RP manages to be among the leaders in providing payment and calculating services. [Russian Post, 2015]

### **Domestic letters**

The price for sending letters is in the table 8. The VAT is 18%, the currency was converted just for the visual comparison. Any written correspondence that fits in the size (max 229x324 mm, maximum weight 100g) is considered as a letter. If it surpasses these dimension than it is considered as a parcel.

**Table 8.** Prices for sending letters. [Russian Post, 2015]

Type, max weight (g)	Maxi size (mm)	Standard price	Priority price	
Post card, 20	120x235	0.27 EUR	0.64 for priority	
Letter, 100	229x324	0.48 EUR + 0.03 EUR per each 20	0,84 + 0.05 per each 20 g	1.92 for letter with declared value.
Parcel, 100 - 2000	L+W+T no more than 0,9 m	0.79 + for 0.036 per each 20	1.13 for priority + 0.036 per each 20g	

Post presumes that any parcel already has weight equal 100 g. Therefore it charges initial fee (0,79 or 1,13) and then it adds additional 0,036 EUR per each 20 g or less. So if my priority parcel weights 341 g. I will be charged  $1.13 \text{ EUR} + 0.036\text{EUR}*13 = 1.17 \text{ EUR}$  (73.23 RUB). [Russian Post, 2015]

### Domestic parcels

The post has to provide services on much bigger territory and forward sending's on greater distances and for that reason the price is affected by the distance. The next table will show the prices for sending parcels with declared value via ground and airmail. Due to Russia's vast territory and unstable quality of its road system, air transportation is essential. All returns are charged according to prices for sending. Prices are in the following table. [Russian Post, 2015]

**Table 9.** Prices for sending parcels [Russian Post, 2015]

Ground transport	
Distance (km)	Price per each 500 g with VAT, EUR
Up to 600	1.06
Up to 2000	1.36
Up to 5000	1.53
Up to 8000	1.79
More than 8000	1.97
Air transport	
Tariffs set by air transportation companies + fee for each 500 g	1.89 with VAT
Additional fee for each count of overweight	0.61 with VAT

## Packages

The difference between parcels and packages comes from policies. Russian Post maintains strict policy regarding sending's size, form + type of the items inside.

**Table 10.** Prices for sending packages. [Russian Post, 2015]

Type	Tariff with VAT, EUR	
Package, 425*265*380 mm, max weight 10 kg	Ground transport	Air transport
Distance	Price	
Up to 600 km Central Russia + South Russia	3.18 + 0.273 for each additional 500 g or less	6.30 in addition to fee charged by air transportation company
Up to 2000 km Central Russia + South Russia	3.22 + 0.314 for each additional 500 g or less	6.30 in addition to fee charged by air transportation company
Up to 600 km North-western Russia + Urals + Siberia	3.19 + 0.30 for each additional 500 g or less	6.64 in addition to fee charged by air transportation company
Up to 2000 km North-western Russia + Urals + Siberia	3.23 + 0.33 for each additional 500 g or less	6.64 in addition to fee charged by air transportation company
Heavy package, 425*265*380 mm, max weight 20 kg	Price charged on the same conditions as for ordinary package + 30%	6.30 in addition to fee charged by air transportation company + 1.89
Non-standard package, Length+width+thickness no more than 300 mm, max weight 20 kg	Price charged on the same conditions as for ordinary package + 30%	6.30 in addition to fee charged by air transportation company + 1.89
Heavy oversized package	Price charged on the same conditions as for ordinary package + 40%	6.30 in addition to fee charged by air transportation company + 1.89
Fragile package	Price charged on the same conditions as for ordinary package + 30%	6.30 in addition to fee charged by air transportation + 30%
Additional transportation and returning fees are paid accordingly to original tariff		

## **E-services**

There offering for e-services is quite limited. One reason for that is that Russian customers tend to use post office services rather using Internet. There is only small e-shop and .pdf blanks for special occasions like migration service registration list + hyper-links to partners' web-sites. [Russian Post, 2015]

During the Christmas time there is possibility to order New Year Letter (Hello from Father Frost) starting form 2.98 EUR for all Russia. In addition some package of toys\games, candies etc. can be included alongside the letter, maximal price is 27,52 EUR. [Russian Post, 2015]

Summary:

Among all introduced some the most interesting e-services are presented in the following list. All these are unique compared to Russian Post:

1. Austrian Post's HP ePrint to remotely print needed files immediately in closest post offices.
2. Austrian Post's StampCode as possibly efficient mean to pay for services without using classic stamps.
3. ItellaPosti's Minun Markka to create fully legal stamps to pay for all other provided services.
4. Australian Post's Youshop service that can help customers to get their goods via post that cannot be reached in another way or it will take much more efforts.

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### 3.1.2 Field of problems of Russian Post

In this part author has decided to deal with external and internal environment of Russian Post company and conducted matrix analysis. In order to identify most potential ways for innovative development author has provided expert estimation of foreign innovations in postal industry combined with analysis of company's business model and its consequent field of problems. Results can be assessed in the following tables.

**Table 11.** Russian Post business model - Key parameters [Russian Post, 2015]

Key partners	Key activities	Key competitive features	Relations with customers	Customer segments
- State institutions	<ul style="list-style-type: none"> <li>- Organization and maintenance of shipment system</li> <li>- Establishment of shipping branches</li> </ul>	<ul style="list-style-type: none"> <li>- Reliable shipment of postal products</li> <li>- Official processing of documents</li> <li>- Other services for private consumers</li> </ul>	<ul style="list-style-type: none"> <li>- Customers demand appropriate shipping speed combined with reliability</li> <li>- Current prices are considered unsatisfactory</li> </ul>	<ul style="list-style-type: none"> <li>- State institutions (factories, ministries, state-run organizations)</li> <li>- Employees of state-run companies</li> <li>- Highly accustomed private customers</li> </ul>

**Table 12.** Russian Post business model - Resources [Russian Post, 2015]

Key Resources	Supply channels
<ul style="list-style-type: none"> <li>- Financial resources of postal offices and shipping hubs</li> <li>- Experienced staff</li> </ul>	<ul style="list-style-type: none"> <li>- Main channel - ground and aerial transport</li> <li>- Notifications are mostly delivered personally</li> </ul>

**Table 13.** Russian Post business model - Finances [Russian Post, 2015]

Structure of expenses	Income flow
<ul style="list-style-type: none"> <li>- Payroll budget</li> <li>- Infrastructural expenses</li> <li>- Big expenses from archaic methods of shipping</li> <li>- Unchanging income from key partner</li> </ul>	<ul style="list-style-type: none"> <li>- Accustomed customers pay for current services</li> <li>- Customers are ready to purchase high technology services via Internet banking and other systems</li> </ul>

According to the business model of Russian Post author concludes that company's rigidities are:

1. Low-tech production of services
2. Low level of computerization
3. Untenable high expenses on old services and products
4. Low level of interest in potential profit from developing services and new customer groups

### **3.1.3 STEEP-analysis**

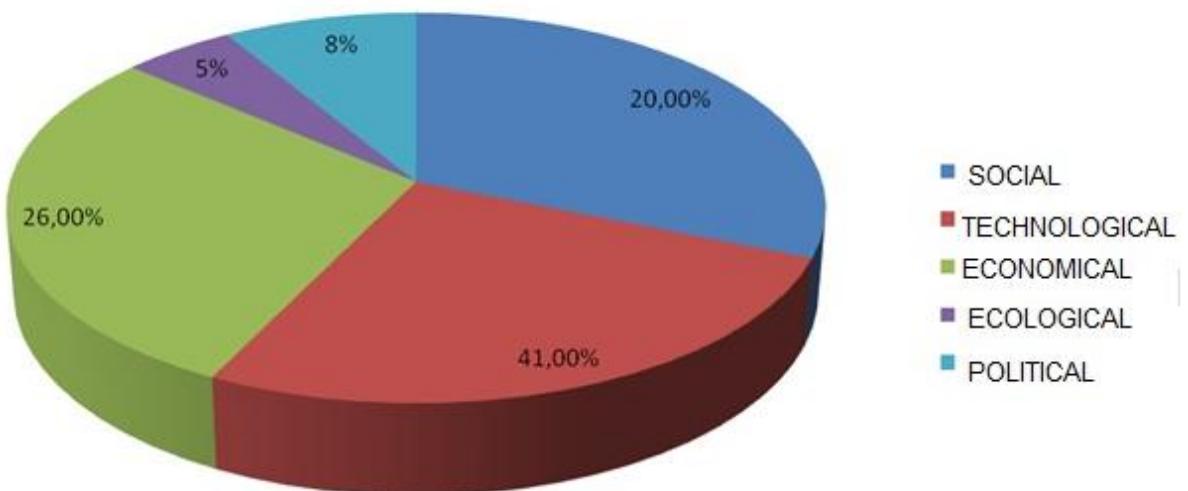
In order to obtain a desirable level of understanding of how macro factors of external environment will affect the planning process of this work and project for Russian Post company, author utilized the analysis of Social, Technological, Economical, Environmental and Political factors that influence business processes.

**Table 14.** STEEP-analysis

<b>Political factors</b>	<b>Economical factors</b>
<ul style="list-style-type: none"> <li>- Changes in monopolistic status of the company</li> <li>- Decrease of demands to emerging actors</li> <li>- Expansion of authority on processing of official documents</li> </ul>	<ul style="list-style-type: none"> <li>- Continuing economic crisis</li> <li>- Stable positions above breakeven point</li> <li>- Growth of the demand in financial and commercial services</li> </ul>
<b>Environmental factors</b>	
<ul style="list-style-type: none"> <li>- Increasing price on energy products increases company's expenses</li> </ul>	
<b>Social factors</b>	<b>Technological factors</b>
<ul style="list-style-type: none"> <li>- Growth of the amount of active Internet users in Russia</li> </ul>	<ul style="list-style-type: none"> <li>- Increase of availability of unlimited access to the Internet in Russia</li> <li>- Increasing level of innovative production and computerization of postal industry</li> </ul>

**Table 15.** Evaluation of probability of appearance and level of influence

Factors	Level of influence (27)	Character	Weight	Probability	Average probability
Changes in monopolistic status of the company	1	Negative	0,03	1	- 0,03
Decrease of demands to emerging actors	4	Negative	0,14	3	- 0,42
Processing of official documents	4	Positive	0,14	2	+ 0,28
Increasing price on energy	1	Negative	0,03	1	- 0,03
Continuing economic crisis	5	Negative	0,18	5	- 0,9
Stable positions above breakeven point	3	Positive	0,11	3	+ 0,33
Growth of the demand in commercial services	4	Positive	0,14	3	+ 0,42
Growth of the amount of active Internet users in Russia	5	Negative	0,18	5	- 0,9
Increase of availability of the Internet	5	Negative	0,18	5	- 0,9
Increasing level of computerization	5	Positive	0,18	5	+ 0,9



**Graph 1.** STEEP-analysis

STEEP-analysis has shown that in short-term Russian Post company will be mostly influenced by technological, economical and social factors with increasing availability of access to the Internet among users of 20 years old and older. In order to saturate their needs company will require to update its product portfolio with the services that can be easily and comfortably operated via mobile and portable computing devices. Development of technology and trends has led to computerization which has affected on the volume of sending traditional mail. Nowadays people want faster delivery and they are ready to pay for that. It doesn't really matter what final innovation would be implemented to cover decreasing amount of parcel shipments but existing logistic chain should be fully modified. It is possible that collaboration between competitors and Russian Post company will become more often as it could help to stabilize prices and reduce common expenses.

### 3.1.4 Michael Porter's Five Forces

For the greater understanding of threats influencing the project of innovative development of Russian Post author has conducted analysis of competitive environment by studying M. Porter's Five Forces [Porter, 2008].

**Table 16.** Threat from substitutes

Parameter	Score		
Substituting products - "Price\Quality"	Big postal companies possess greatest share of the market	Courier companies, market's newcomers	No substitutes
	0	1	0
<b>Total Score</b>	<b>1 - level of threat from substitutes is low</b>		

**Table 17.** Threat from new entrants

Parameter	Score		
Quantity of actors	High level of saturation	Medium level of saturation	Low level of saturation
		2	
Market's temp of growth	Stagnation	Stable	Explosive
		2	
Level of differentiation of postal products	High level	Medium level	Low level
			1
Boundaries on increasing of prices	Strict boundaries	Moderate boundaries	No boundaries
	2		
<b>Total Score</b>	<b>8 - threat from competitors is steadily growing</b>		

**Table 18.** Intensity of competitive rivalry

Parameter	Score		
Economy in the means of productions	Low level	Medium level	High level
		2	
Power of brand	No big actors	Few equal actors who hold 50% of the market	Few equal actors who hold 80% of the market
	1		
Level of differentiation of products	High level	There is a niche product	Low level
		2	
Quantity of required investments	Low, quick payback period	Moderate, medium payback period	High, slow payback period
			1
Readiness to decrease prices	There are strict inhibitors	There is a possibility	No prohibitions
	3		
Temp of industry's growth	High	Slowing	Stagnation
		2	
Governmental policy	No restrictions	Some restrictions	Total control
		1	
Access to the channels of distribution	Open	Moderated	Specified
		2	
<b>Total score</b>	<b>12 - medium probability of the entrance of new actors</b>		

**Table 19.** Bargaining power of customers

Parameter	Score		
Share of big customers	More than 80%	Around 50%	Sales are distributed equally
			1
Probability of seeking for the new options	There is similar offer	Services are special, no totally similar offer	Services are unique, no similar offer
		2	
Price sensitivity	Always seek for the cheapest	On if the difference is substantial	Non-existent
		1	
Satisfaction with the current quality of products and services	Not satisfied with main features	Not satisfied with secondary features	Total satisfaction
		2	
<b>Total Score</b>	<b>6 – level of client loss is medium</b>		

**Table 20.** Bargaining power of suppliers

Parameter	Score	
Quantity of suppliers	Monopoly	Various choice
		1
Limitation of resources	High	Low
	2	
Change-over expenses	High	Low
	2	
Priority level for suppliers	Low	High
		1
<b>Total Score</b>	<b>6 – Medium level of suppliers' bargaining power</b>	

**Table 21.** STEEP-analysis summary

Parameter	Score	Specifics	Decisions
Threat from substitutes	Low	Company has unique offers	Increase customers' awareness of the services
Intensity of competitive rivalry	Medium	Market is highly competitive, there are the boundaries of price razing	Monitor competitors' product and services, develop unique offers
Threat from new entrants	Medium	Probability of entrance is medium	Monitor progress of competitors, understand ways of entrance
Bargaining power of customers	Medium	Medium, but there is a threat of losing the big customers	Diversify product portfolio, develop saving programs
Bargaining power of suppliers	High	Company is highly dependent on whether suppliers are stable	Initiate search and development of backup option

This review clearly shows that the biggest threat looming before Russian Post is the continuous deterioration of quality of its products and services in face of inevitable increase of competition and improvement of substitute's offer. Right now it is impossible to stabilize level of sales and competitiveness unless company will introduce new, innovative project that will offer a service which can reliably catch the attention of customers and build a foundation for an additional activities in author's way of innovative development.

### **3.1.5 BCG Matrix**

Boston Consulting Group matrix was used to assist strategic analysis and planning of Russian's Post marketing activities according to actual performance of its products and services and how it corresponds and influences its position in the market. Additionally it was implemented to evaluate financial needs and level of competitiveness. [BCG, 1970].

Primary offer of Russian Post and its competitors [Russian Post, 2015]:

1. Postal services (physical entities): private competitors provide express delivery but their offer is more expensive.
2. Postal services (legal entities): private companies guarantee timed and reliable delivery and enjoy great demand of their services.
3. Parcels and packages: key activity of private companies.

By the end of 2015 Russian Post's services were divided the following way [Russian Post, 2015]:

1. Letters and parcels – 10%;
2. Packages – 70%;
3. Other services for the people (selling and subscription on newspapers and journals, selling lottery tickets, telephone calls, ticket sales, «Cyber Mail») – 15%;
4. Financial services (distribution of pensions and benefits, credit payments via post office, financial transactions, credit cards, micro loans, insurance) – 5%.

Major postal operators in Russia [Russian Post, 2015]:

1. «Russian Post» – 80%;
2. DHL Express – 8%;
3. UPS – 7%;
4. other – 15%.

Major operators of express post delivery [Russian Post, 2015]:

1. DHL Express – 30%;
2. UPS – 25%;
3. FedEx – 20%;
4. EMS Russian Post – 20%;
5. Other – 5%.

**Table 22.** Data for BCG matrix

Service	Market growth rate, %	Relative market share, %	Share in total volume, %
Letters and parcels	10	80	20
Packages	25	60	35
Services for physical entities	10	15	10
Financial services	15	5	15
Services for legal entities	20	25	20

In order to scale different services author used:

1. The mean growth rate of the market, equal to the average growth rates of the market for each of the types of services:

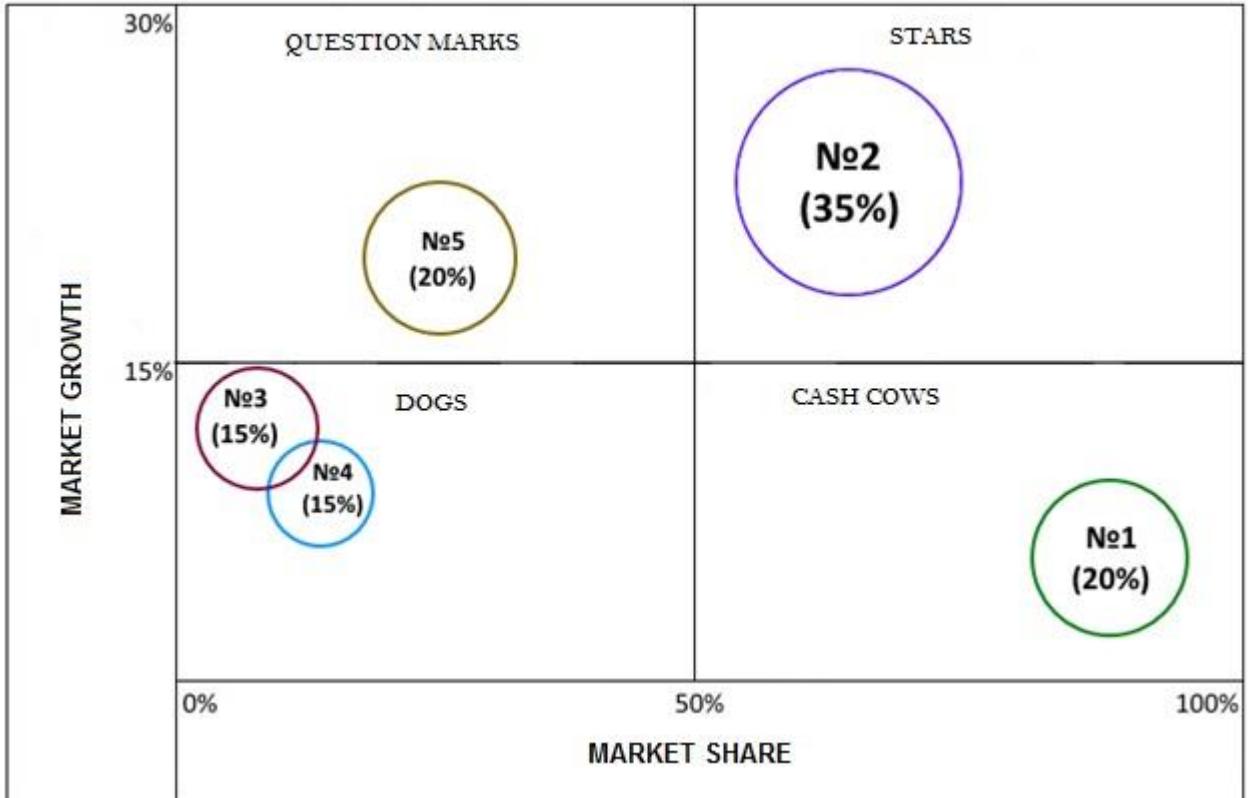
$$(10 \% + 25 \% + 10 \% + 15 \% + 20 \% ) / 5 = 16 \% .$$

2. The relative share of the market -the average value in the range from minimum to maximum values of the relative market share:

$$(80 \% + 60 \% + 15 \% + 5 \% + 25 \% ) / 5 = 37 \% .$$

3. The diameter of a circle to represent the service is chosen in proportion to the volume of a service in the total volume of sales of Russian Post.

- Letters and Parcels
- Packages
- Services for physical entities
- Financial services
- Services for legal entities



**Graph 2.** BCG Matrix

The results of BCG matrix show that:

- Delivery of packages - **STARS**
- Delivery of parcels and letters - **CASH COWS**
- Services for physical entities and financial services - **DOGS**
- Services for legal entities - **QUESTION MARKS**

### 3.1.6 Russian Post's strategic business units

Strategic Business Unit is an independent business segment within the enterprise which carries out its activities in a number of related industries, united by common demand of raw materials used or the production technology. The long-term position of the company is determined by extracting and analyzing the strategic areas of management. For innovative project it is an area in which the potential need for innovation corresponds resource potential. So it determines the interdependence of the various stages of the life cycle of desired innovation. [BCG, 1970].

**Table 23.** Russian Post's strategic business units [Russian Post, 2015]



**Summary:**

**SBU #1 - Shipment of postal products.**

The cornerstone of the company, the largest source of income and a high share of the expenses.

With the development of information technology level of demand of it will steadily decline.

**SBU #2 - Transfer of monetary benefits and pensions.**

The second most important service delivered to the population, open to application of high-tech delivery methods in order to reduce costs in the transfer.

**SBU #3 - Express mail.**

Provides more favourable conditions for the delivery of mail, but the high cost, competition with data transmission over the Internet and the higher price of the service reduces the competitive advantage.

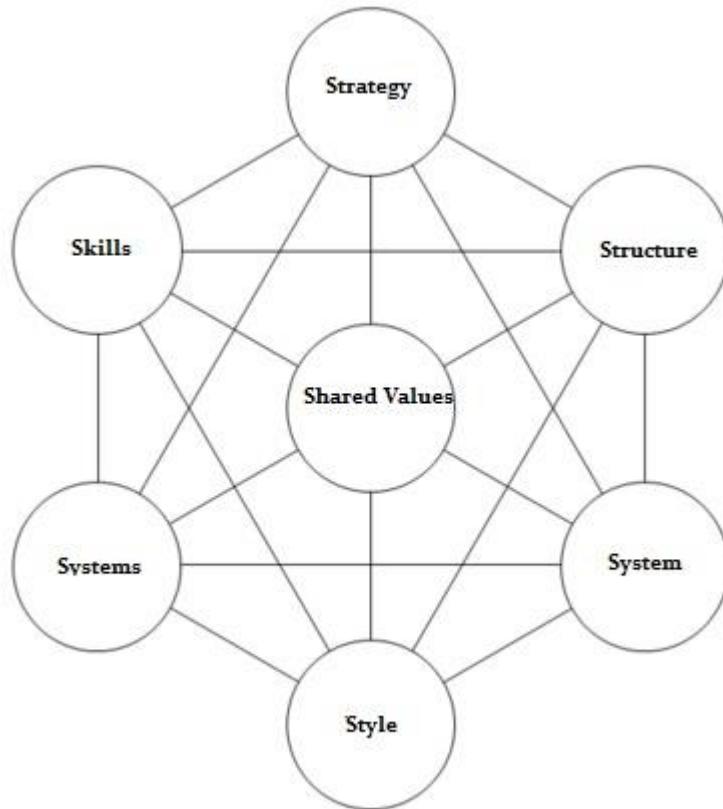
**SBU #4 - Delivery of periodical press and media**

Scale of this service is large enough, but due to the emergence of electronic books and periodicals, this service will eventually become less popular.

## 3.2 Internal Environment of Russian Post

### 3.2.1 McKinsey's 7S

In this part author implemented McKinsey's model in order to assess the effectiveness of the Russian Post activities by visual analysis of the seven basic elements of the company: strategy, skills, shared values (corporate culture), structure, personnel, systems and style.



**Graph 3.** McKinsey's 7S [Waterman et al, 1980]

#### Strategy

The strategy of Russian Post is the "best price" strategy. It combines strategic focus on low costs with a strategic focus on exceeding the minimum levels of quality, service, properties or performance. The aim of the strategy is to create a competitive advantage by offering consumers greater value for a lesser price. This is done as a result of product offerings with the core indicators similar to those of the scale "quality - services - properties - performance" of competitors' products, but with a significantly lower cost required to obtain these indicators. Among all companies in the sector in question, the Russian Post sets the lowest prices for postal services, which allows it to retain most of the customers. Key indicators are not high, but not as low as it could be. [Russian Post, 2015]

## **Structure**

The structure of "Russian Post" can be roughly divided into four main vertical management levels. [Russian Post, 2015]

1. Enterprise - Central Management Apparatus
2. Branches - Federal postal service management apparatus, Primary center of magistral mail shipments.
3. Main sorting centers
4. Post offices.

As part of the central management apparatus there are several functional offices:

1. Department of commercial operations
2. Department of postal services
3. Department of advertising and marketing
4. Department of magistral-distrubutive network
5. Department of property management and development
6. Department of branch network
7. Department of quality management
8. Department of labour rights protection, industrial safety and environmental monitoring
9. Department of audition and revision
10. Juridical department
11. Department of telecommunications and technical supplying
12. PR and mass media relations department
13. Accounting department
14. Treasury department
15. Budgeting department
16. Risk management and insurance department
17. Department of international relations
18. Security department
19. Staff management department
20. Administrative department

## **System**

Formal management procedures and daily activities of the company are strictly regulated by various regulatory documents (Federal Law on postal services, rules of postal services, order of reception and delivery of domestic registered mail, the concept of restructuring the federal postal communication, conventions and agreements of the World Postal Union, the procedure for admission, delivery and presentation of internal parcels, Regulation Certification Center "Russian Post" in the processing of personal data), but in reality, it's not so strictly. Informal procedures are not present.

## **Style**

In an effort to meet the needs of its clients, Russian Post is constantly developing new activities and offers its customers both traditional postal as well as modern financial, information, commercial and retail and other services.

## **Skills**

In total company offers its customers more than 80 postal, financial, info-communicational and other services. Through post offices company carries out delivery of pensions and benefits, as well as periodical media. Customers can pay utility bills, receive and repay bank loans, cash funds with plastic cards, travel insurance, buy lottery, railway tickets, as well as consumer goods.

## **Staff**

One of the important activities of staff policy of the company is a staff development according to strategic objectives of the enterprise. The number of employees is 380 thousand. Training is conducted in external educational institutions and within the enterprise.

## **Shared values**

Constant improvement of the economic performance of the network of post offices, the quality of services for clients and working conditions of employees.

### **3.2.2 SNW-analysis**

SNW-analysis was used to review Strengths, Weaknesses and Neutral features of Russian Post's organization.

The following table demonstrates company's profile. Blue boxes mark the current condition of subsystems and green boxes define desirable condition that is to be achieved in the next 5 years

Score of the current state: 8 points.

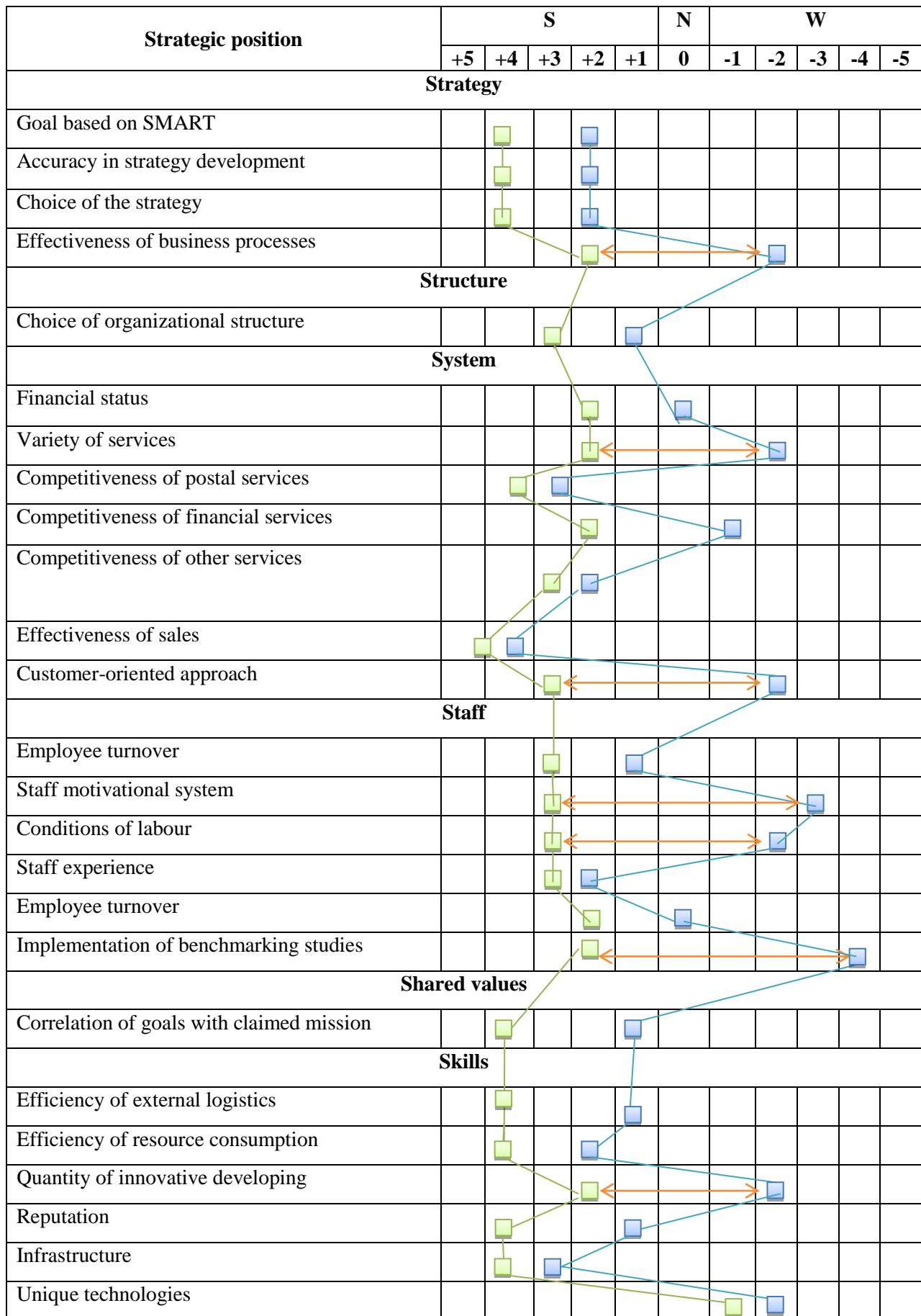
Score of the future state of 73 points.

The ratio of the current state to the future =  $8/73 = 0.10$

The desired result is achieved only by 10%.

Summary: Almost all of the company's positions are at a fairly medium level. It is necessary to review the organization of the enterprise at all levels. Particular attention should be paid to supplying the enterprise with modern facilities, creating a favorable customer culture, organization of strategic marketing, staff training.

**Table 24.** SNW-analysis



### **3.2.3 SWOT-analysis**

In this part author has evaluated market features of Russian Post's environment that will be most probably influencing any future venture including Strengths, Weaknesses, Opportunities and Threats.

**Table 25.** SWOT-analysis

<b>Strengths</b>	<b>Weaknesses</b>
- A large number of personnel and resources-allows to concentrate activities with detrimental effect on the main production  - A developed network of offices -allows to distribute activities in a broader field	- Aging methods of business activity -low level of supply of services via the Internet- 3 years  - Obsolescence of the used technologies - low computerization of offices - 3 years
<b>Opportunities</b>	<b>Threats</b>
Achieving an overwhelming superiority in resources compared to the competition-the growth of innovation, 2-3 years  - Acceptance of the client-oriented approach, 1 - 1.5 years	- Increased competition after privatization- 2 years  - Increased competition due to the loss of popularity- 3 years  - Recession of Russian economic - 3 years

As the result we can clearly see that despite of looming threats and obvious weaknesses, company still possesses enough resources and time to exploit its innovative potential without hampering its main activities.

### 3.2.4 Gleister matrix

For the gradual analysis of the internal environment and the search for solutions and problems that accompany it, author has applied Gleister matrix.

**Table 26.** Gleister matrix

Level	Problem	Sign of presence	Solving methods	Expected outcome
Enterprise	Low level of digitalization of products and services	Decrease of competitive advantage over private companies	Decrease of focus on "dogs" and "question marks"	Release of funds needed for innovative projects and digitalization
Business process	Untenable scale of hand work	Unable to provide modern, desired services	Automatization of production and distribution	Modernization of business processes
Post office	Updated equipment is not widespread	Unable to execute orders just in time	Modernization of big and medium postal offices	Increase of customers who use the Internet and mobile networks
Employee	Modern instruments of service are not widespread	Unable to work with modern system of effective service	Increase of investments in education and training	Improvement of service process, improvement of feedback management

As the result, it should be noted that by using the available opportunities, the company will be able to avoid imminent threats without using an excessive amount of resources and without strong opposition from existing inhibitors (weaknesses). Most of the problems and associated risks are directly related to technological backwardness companies from world-class postal service, but there are technological and financial bases, as well as human resources are sufficient for the development and implementation of innovations aimed at reducing the backwardness.

### **3.3 Matrix-integral analysis of customer requirements and assuring characteristics**

#### **Stage I - Understanding of the purpose**

In order to set up the objectives for project, author selected the product which must be subjected to innovative modernization. Another goal is to select the conditions which increase the probability of successful commercialization of new (modernized) product.

In this project, subjects for modernization are postal product and services provided at post offices of Russian Post company.

#### **Stage II - Analysis of Customer's Requirements (CR)**

With the help of expert feedback and benchmarking study, author identified major customer requirements, defining the demand for postal products on Russian market.

**Table 27.** Customer Requirements

№	Customer Requirement	Score (0-10)		Note
		Basic	Project	
1	Increase the variety of e-services	1	6	<b>Important requirement</b>
2	Improve equipment in offices	3	6	
3	Install packstations	2	7	<b>Important requirement</b>
4	Improve speed and reliability	2	8	
5	Introduce new services of document processing	5	8	
6	Refurnish old offices	3	5	

This project views most important Customer Requirements as the following:

1. Increase the variety of e-services available to order via the Internet and mobile networks. In point-based system quality of this service is estimated at 1 point in basic state, and at 6 points in the project.
2. Broad introduction of packstations in order to increase the efficiency of the initial reception and treatment, and to reduce the difficulty of the client. In point-based system quality of this service is estimated at 2 points in basic state, and at 7 points in the project.

### **Stage III. Product positioning**

At this stage, author conducted an assessment of the level of satisfaction of each customer requirement that can be found in similar product made by competitors or substitutes, as well as in company's own product before changes- $P_{bi}$ -if it were previously released. [Topuzov, 2005] This stage is referred in the table 28.

### **Stage IV. Target values which satisfy new customer requirements**

Here author created a list of target values expressed point-based system for each customer requirement ( $P_{npi}$ ), which a new product should have to ensure a high-level of demand. Target values of consumer demand which do not need any changes, assumed equal to the basic state:  $P_{npi}=P_{bi}$ . Other target values are desired higher or equal -  $P_{npi} \geq P_{bi}$ . [Topuzov, 2005] This stage is referred in the table 28.

### **Stage V. Choice of characteristics assuring projected customer characteristics of a new product**

At this stage author defined key organizational, structural, technical, economical characteristics ( $AS_j$ ) of a developing product that will be able to provide early designed consumer characteristics. [Topuzov, 2005]

**Table 28.** Assuring Characteristics

<b>Nº</b>	<b>Assuring characteristic</b>
1	Training personnel
2	Installation of new offices
3	Establishment of a new web service system
4	Introduction of new hubs of distribution of supplies
5	Signing a contract with the state structures

As a result of the analytical study of interdependence between customer requirements and assuming characteristics author will prioritize the realization of chosen assuming characteristics.

## Stage VI. Correlation of assuring characteristic and consumer characteristics

The correlation is conducted with the help of a matrix showing coefficient of interdependence. Each coefficient shows the extent on which each assuring characteristic assists implementation of each consumer characteristic of a new product. Value of 1 denotes total intercommunion. Value of 0 denotes absence of any connection. Intermediate values show a trend towards total intercommunion. Negative value depicts the low level of satisfaction while positive value depict a contrary influence. [Topuzov, 2005]

**Table 29.** Correlation of AS and CC

№	Customer requirement	Assuring characteristic - Degree of intercommunion				
		Training of personnel	Installation of new offices	Establishment of a new web service system	Introduction of new hubs of distribution of supplies	Signing a contract with the state structures
1	Increase the variety of e-services	0,7	0,3	0,9	0,6	0,6
2	Improve equipment in offices	0,5	0,8	0,3	0,4	0,4
3	Install packstations	0,7	0,7	0,8	0,6	0,3
4	Improve speed and reliability	0,9	0,6	0,6	0,8	0,2
5	Introduce new services of document processing	0,4	0,3	0,7	0,2	0,9
6	Refurbish old offices	0,2	0,7	0,4	0,8	0,3

## Stage VII - Correlation matrix of assuring characteristics

Since the implementation of some characteristics affects the feasibility of others, it is necessary to identify how much they influence each other.[Topuzov, 2005]

**Table 30.**Correlative connection between assuring characteristics

N <sub>2</sub>	Assuring characteristic	Training of personnel	Installation of new offices	Establishment of a new web service system	Introduction of new hubs of distribution of supplies	Signing a contract with the state structures
1	Training of personnel	****				
2	Installation of new offices	0,2	****			
3	Establishment of a new web service system	0,8	0,6	****		
4	Introduction of new hubs of distribution of supplies	0,5	0,7	0,4	****	
5	Signing a contract with the state structures	0,5	0,2	0,6	0,2	****

## Stage VIII - calculation of correlated coefficients of the connections between customer requirements and assuring characteristics

After evaluation of interconnection of assuring characteristics, system analyzes the interconnection between the requirements of customers and interrelated assuring characteristics

by via introduction of the coefficients of correlation:  $Af_{ij} = A_{ij} + \sum_{i=1-n}^{j=1-k} K_{ij} \times A_{ji}$ , where i (n) –

number (quantity) of a customer requirement; j (k) – number (quantity) of an assuring characteristic. MS Excel model was implemented in this stage. [Topuzov, 2005]

**Table 31.** Amplitude of interconnections between main customer requirements and correlated assuring characteristics

№	Required parameters	A <sub>f1</sub>	A <sub>f2</sub>	A <sub>f3</sub>	A <sub>f4</sub>	A <sub>f5</sub>
		Training of personnel	Installation of new offices	Establishment of a new web service system	Introduction of new hubs of distribution of supplies	Signing a contract with the state structures
Y1	Increase the variety of e-services	0,7	0,3	0,9	0,6	0,6
Y2	Improve equipment in offices	0,5	0,8	0,3	0,4	0,4
Y3	Install packstations	0,7	0,7	0,8	0,6	0,3
Y4	Improve speed and reliability	0,9	0,6	0,6	0,8	0,2
Y5	Introduce new services of document processing	0,4	0,3	0,7	0,2	0,9
Y6	Refurnish old offices	0,2	0,7	0,4	0,8	0,3
	Total score	3,4	3,4	3,7	3,4	2,7

This stage allows to create a revised matrix showing interconnections of assuring characteristics (one with another) and with customer requirements.

### Stage IX - Evaluation of weight indexes of customer requirements

This process concerns not only the evaluation of the basic state of customer requirements, but also a desired degree of improvement of each requirement of a project.

- At first author calculated the degrees:  $K_{pi} = P_{npi} / P_{\delta i..}$ .
- Then each requirement was given respective ratings:  $R_{nmi} = P_{npi} / \sum P_{npi}$
- Thirdly, weight of each requirement was found out:  $V_{mni} = K_{pi} \times R_{nmi}$ .
- At the end program calculated total sum of requirements' weight and a proportion that each requirement has in this sum:  $V_{mni}(oe) = \frac{V_{mni}}{\sum V_{mni}}$

**Table 32.** Evaluation of weight indexes

<b>Nº</b>	<b>Requirements</b>	<b>Position in the basics</b>	<b>Customer requirements</b>	<b>Rating</b>	<b>Coefficient of improvement</b>	<b>Weight of a requirement</b>	<b>Proportion of requirement weight</b>
i	$Y_i$	$P_{bi}$	$P_{npi}$	$Rtpi = P_{npi} / \sum P_{npi}$	$Kpi = P_{npi} / P_{bi}$	$Vtpi = Kpi * Rtpi$	$Vtpi(oe) = Vtpi / \sum Vtpi$
1	Increase the variety of e-services	1	6	0,15	6,00	0,900	0,287
2	Improve equipment in offices	3	6	0,15	2,00	0,300	0,096
3	Install packstations	2	7	0,18	3,50	0,613	0,195
4	Improve speed and reliability	2	8	0,20	4,00	0,800	0,255
5	Introduce new services of document processing	5	8	0,20	1,60	0,320	0,102
6	Refurnish old offices	3	5	0,13	1,67	0,208	0,066
						3,14	3,141
						Total sum, $\sum Vtpi$	

As the result of the prioritizing of the proportions author has concluded that most needed customer requirement are the 2nd and the 4th.

### **Stage X - Evaluation of realization priority of assuring characteristics**

Program automatically calculates weight of ACs and ranks them basing on several prerequisites. Thus the selection of the most important innovative project is achieved via consistent implementation of the individual steps. [Topuzov, 2005]

**Table 33.** Evaluation of the priority of AC

		Afv1	Afv2	Afv3	Afv4	Afv5	Sum
Nº	Customer requirements	Training of personnel	Installation of new offices	Establishment of a new web service system	Introduction of new hubs of distribution of supplies	Signing contracts with the state structures	
1	Increase the variety of e-services	0,60	0,44	0,64	0,47	0,48	2,62
2	Improve equipment in offices	0,12	0,14	0,15	0,13	0,10	0,65
3	Install packstations	0,38	0,35	0,43	0,35	0,27	1,78
4	Improve speed and reliability	0,51	0,44	0,54	0,50	0,33	2,32
5	Introduce new services of document processing	0,16	0,11	0,19	0,11	0,17	0,73
6	Refurnish old offices	0,08	0,11	0,10	0,11	0,06	0,45
Sum		1,85	1,59	2,05	1,67	1,41	8,56
Rating		21,6%	18,5%	23,9%	19,5%	16,4%	100,0 %

As the result, weight indexes defined priority positions of customer requirements that must be satisfied first of all. In this particular project these are:

- ✓ Increase the variety of e-services
- ✓ Install packstations

As research has shown, in order to meet these CRs, project developers have to introduce the highest ranked assuring characteristics:

- ✓ Training personnel
- ✓ Establishment of a new web service system

Summary: according to the analysis of the external and internal environment of Russian Post, author concluded that project need to have a focus on the innovative development of the company's portfolio of e-services, and therefore, the modernization of the production line and training company's staff to operate and utilize these innovative products and services. Secondly, matrix analysis of customer requirements and assuring characteristics helped to identify the top-priority customers' need that require urgent satisfaction.

## **4 DEVELOPMENT OF INNOVATIVE PROJECT FOR RUSSIAN POST**

In this chapter, author has constructed a hierarchy of goals, defined project's imperatives, analyzed K. Lewin's force fields and built a Gantt diagram-the necessary tools to determine the prerequisites and methods for the implementation of an innovative project which primary goal is the addition of the latest e-services in the company's portfolio. At the end of the chapter author has conducted study of financial indicators of the project determining the financial sustainability in the short term and payback period.

### **4.1 Hierarchy of goals**

The model describes the goals of the company, as well as explaining their relationships.

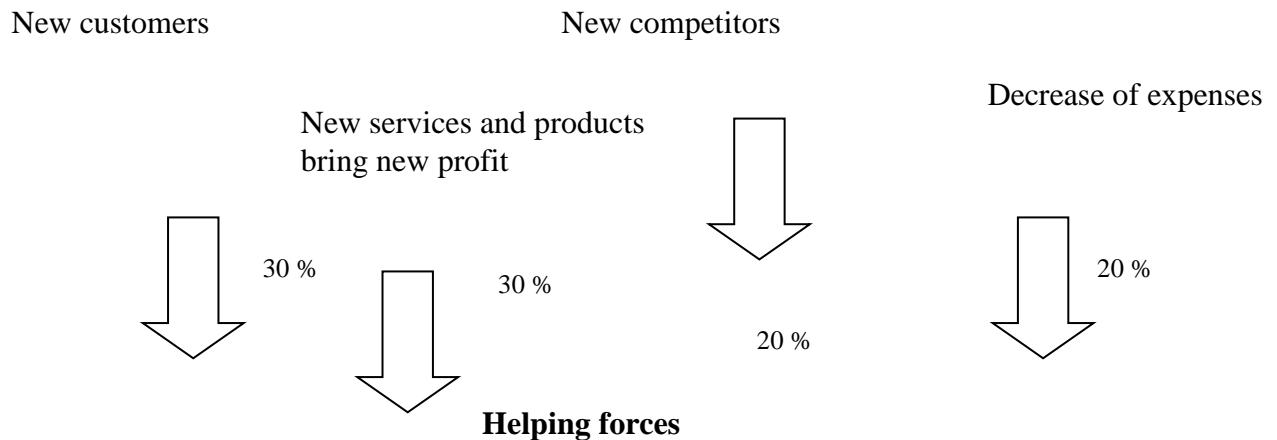
A goal is defined by:

- ✓ qualitative description, expressed in natural language
- ✓ quantitative indicators and their expected values
- ✓ time horizon - the time allotted to achieve the objective.

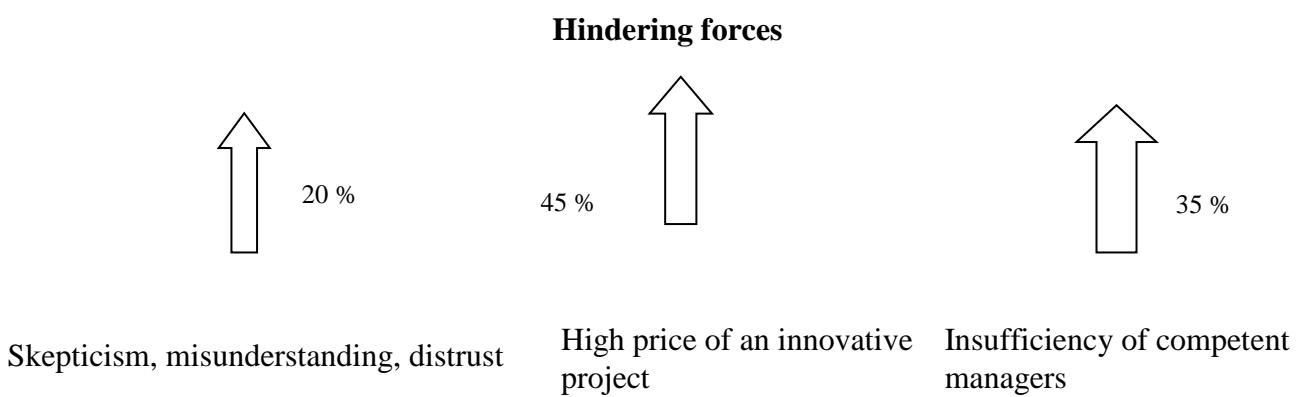
The basis for the construction of the hierarchy is a set of strategic objectives defined in the corporate charter. Goals within the model are carefully classified and structured in the diagram according to SMART criteria. Selection, description and hierarchical ordering of each goal is accomplished by performing a number of relevant analytical procedures. A fully detailed diagram can be viewed in the Appendix of this thesis, [graph 11](#).

## 4.2 Kurt Lewin's force field

In this part author has assessed the helping forces that influence a situation and drive the project towards the successful completion of its goals and related hindering forces that block the movement towards the goals.



Improvement of quality of products and services and expansion of the Russian Post's product portfolio aiming on active, young customers who use Internet very often



**Graph 3.** Kurt Levin's Forces for Russian Post

Obviously, the increase of services' popularity among middle-aged customers is the key helping forces while the most problematic hindering force is the necessity of serious short term investments in purchasing of equipment and staff training.

### 4.3 Russian Post business card

At present, the level of service offerings via the Internet is not sufficient. The processing time is not effective and takes more than five minutes. To solve the problem of computerization of the company project managers are expected to complete the following tasks:

1. Conduct a benchmarking of product portfolio of foreign postal companies
2. Review company's field of problems and propose specific direction of innovative development
3. Develop a project for the solution of identified problems with the help of foreign experience
4. Conduct analysis of financial stability of the project
5. Suggest actions and efforts aimed on the expansion of the achieved result and observe possibilities for further improvement.

In order to understand the measure that goals have to meet: computerization of company's production by adapting experience of foreign companies and modernization of the equipment in offices- it is necessary to compare it with the company's business processes.

**Table 34.** Russian Post's business card [Russian Post, 2015]

Goal	Criteria	Output
<b>Financial</b>		
Increase financial stability of the project	Secure availability of working assets	By current standards
Decrease expenses	Share of expenses in summary income	Decrease by 5%
<b>Customers</b>		
Quick and high-quality service	Carrying-out the requirements	By current standards
Decrease prices on services	Cost in RUR	Decrease by 10%
Increase amount of customers from target groups	Quantity of new customers	Increase by 4% annually
Increase loyalty of new target customer group	Quantity of requests for services	Increase by 10 %
<b>Business-processes</b>		
Installation of automatic service system	Expenses on depreciation of equipment	-
Adaptation of foreign experience	Speed, variety and quality	Increase by 50 %
<b>Training</b>		
Preparing personal for innovations	Acceptance\rejection of new methods	No less than 60 %
Teaching new skills to personnel	Effectiveness of their work	No less than 60 %

## **4.4 Project Imperatives**

The research process has identified two major innovations suitable for early introduction:

1. Installation of pack stations.
2. Establishment of a new web service system

### **Installation of pack stations**

Pack station is an automated terminal designed for drop-out of goods ordered from online stores and catalogs, developed from vending machine. Pack station is equipped with built-in cells - drawers of various sizes to store shipments and a console with touch screen to control the process of receiving, a slot for card payment and a bill acceptor. The number of cells may vary from 32 to 256. Pack stations are usually located in shopping centers, large retail chains, public places.

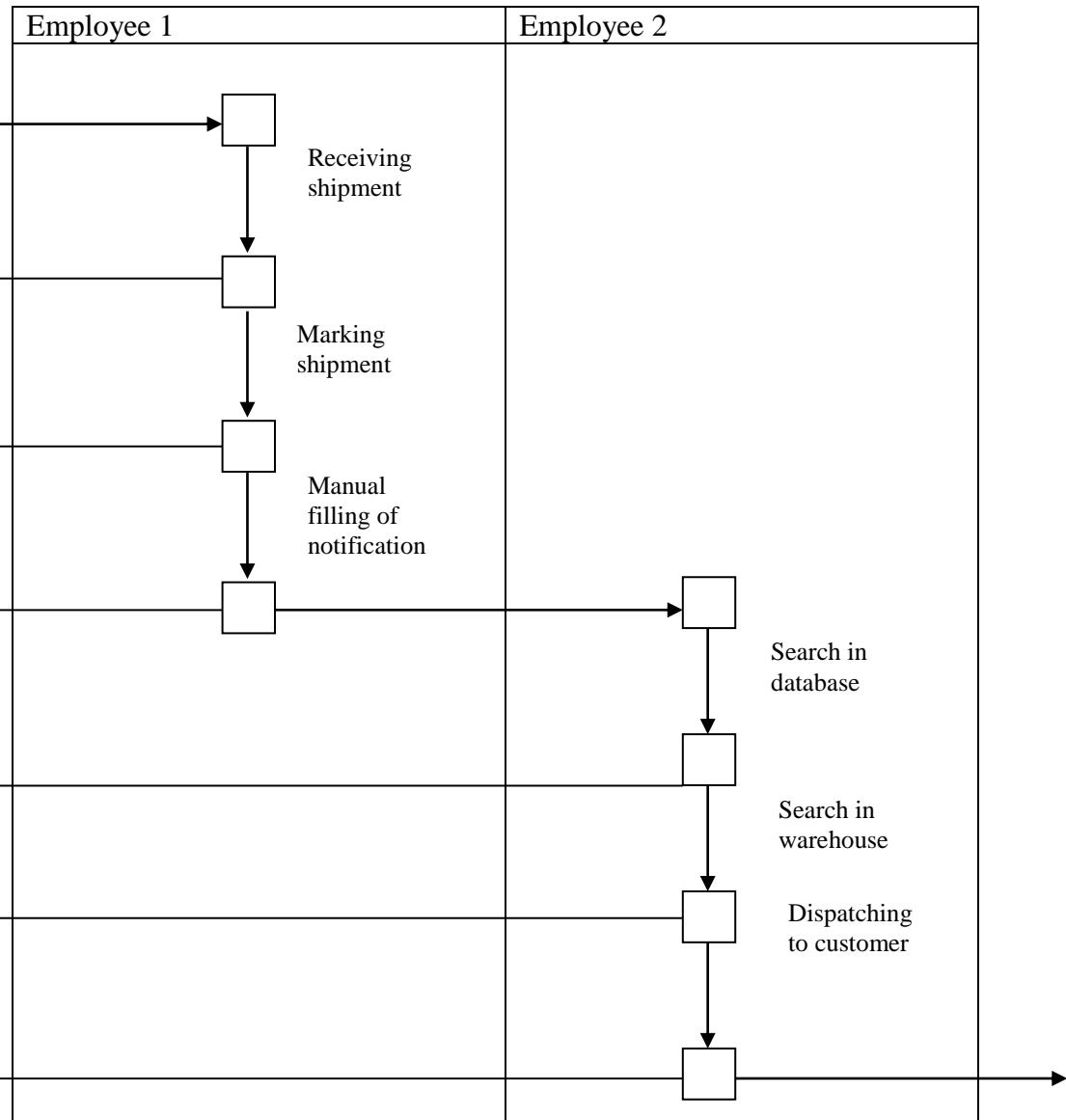
Benefits:

- ✓ High-speed of a delivery
- ✓ No queues
- ✓ Can be installed in various places
- ✓ Customer does not need to pay for a courier
- ✓ Shipment can be taken at any time
- ✓ Customer can pay upon deliver
- ✓ Easy system information

Disadvantages:

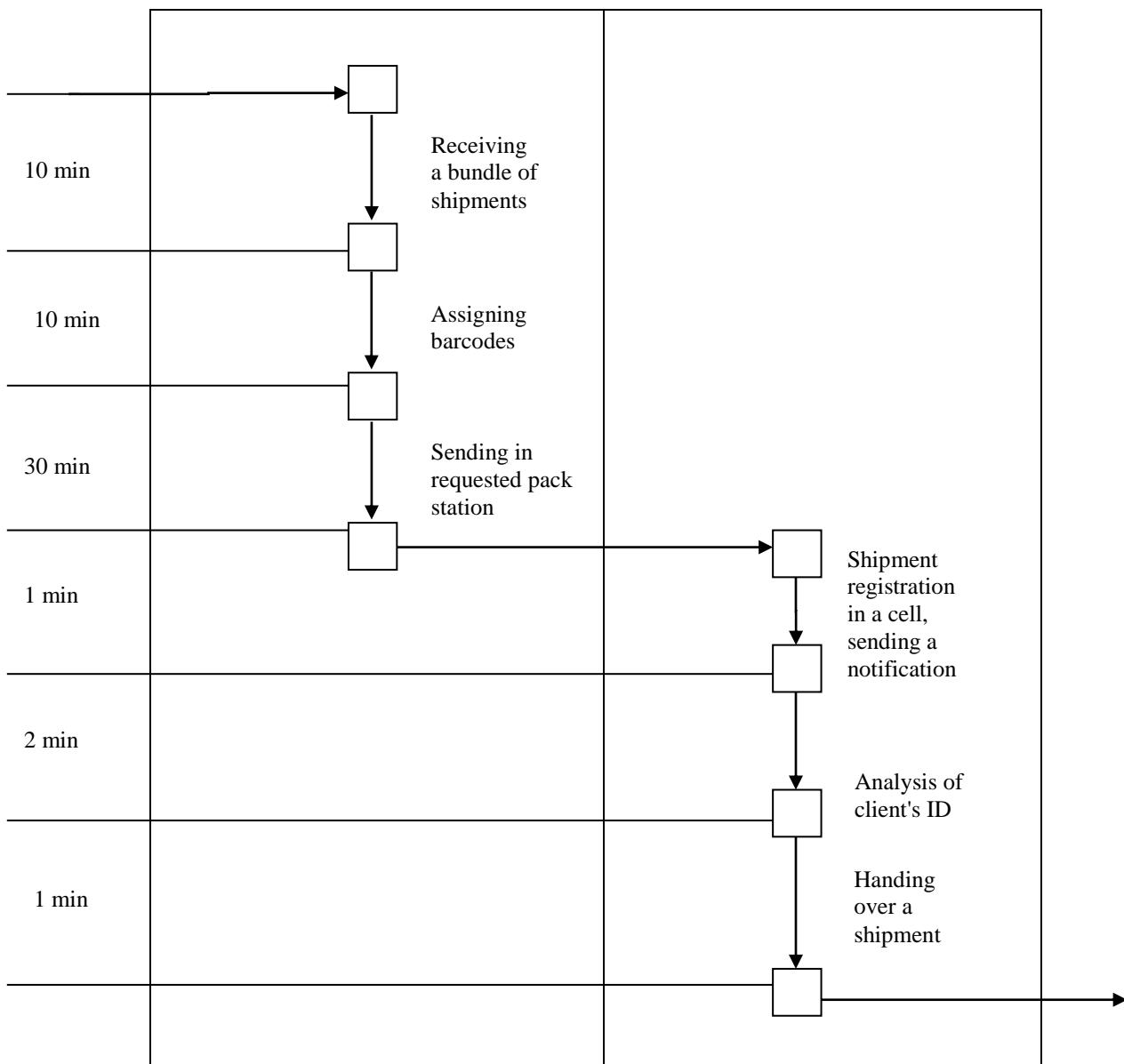
- ✓ Limited capacity of the cells
- ✓ Cells cannot accept non-standard shipment
- ✓ Small duration of cheap storing period

In order to examine pre-project and post-project state author has implemented swim lane diagram. [Swim line diagram, 2011]



**Graph 4.** Pre-project state

Process during pre-project state: the first employee receives several shipments (15 minutes), marks them (15 minutes), fills the notification and types data into the database manually (40 minutes). As a result, when a customer comes to pick up the parcel, second employee searches shipment in the database, manually fills delivery data, (7 minutes); then sends order to warehouse (3 minutes). To receive a shipment client must fill several forms (11 minutes). Total time spent - 81 minutes.



**Graph 5.** Post-project state

Process during post-project state: the first employee receives several shipments (10 minutes), marks them (10 minutes) and assigns barcodes, the sends to the requested pack station (30 minutes). The customer comes to a pack station and presents an ID for scanning (1 minute), the system analyzes the data (2 minutes), and open the cell (1 minute). Total time - 54 minutes.

Therefore, through the use of pack stations and total computerization of the process, required delivery time has been reduced by 1.5 times.

## **Establishment of a new web service system**

Primary innovative e-services that will be introduced within this project are presented in the following list:

1. Austrian Post's 'HP ePrint' to remotely print needed files immediately in closest post offices.
2. ItellaPosti's 'Minun Markka' to create fully legal stamps to pay for all other services.
3. Austrian Post's 'StampCode' as possibly efficient mean to pay for services without using classic stamps.
4. Australian Post's 'YouShop' service that can help customers to get their goods via post that cannot be reached in another way or it will take much more efforts.

Preliminary design of user interface, server, actions diagram, sequence diagram, etc are referred in the Appendix, [graphs 13-16](#) [Dzenov, 2013]. By the end of the project company's customers will acquire access to highly useful services that increase their satisfaction through prompt execution of the order and, thus, bringing benefits to the company.

### **4.5 Gantt diagram**

Development phases of the project are presented in the following table

**Table 35.** Gantt Diagram

<b>Stage</b>	<b>Start</b>	<b>Duration</b>	<b>End</b>
Development of the project	10.01.2016	40 days	09.02.2016
Development of equipment procurement plan	09.02.2016	15 days	24.02.2016
Development of cost budget	24.02.2016	15 days	11.03.2016
Development of execution schedule	11.03.2016	30 days	11.04.2016
Arrangement of equipment procurement	11.04.2016	8 days	19.04.2016
Equipment delivery	19.04.2016	30 days	19.05.2016
Equipment installation	19.05.2016	7 days	26.05.2016
Software installation	26.05.2016	2 days	28.05.2016
Software optimization	28.05.2016	2 days	30.05.2016
Personnel training and final testing	30.05.2016	30 days	30.06.2016

In total the whole project takes approximately 209 days. A detailed representation of the stages can be found in the Appendix, [graph 12](#).

#### 4.6 Calculation of investments payback period

Project development requires on-recurrent expenses needed for the salaries of employees, master developers and other expenses caused by the current project activity. This approximate expense items are shown in the following tables. Installation of equipment requires additional expenses. [Tomashev, 2006]

**Table 36.** General expenses

<b>№</b>	<b>Expense item</b>	<b>Cost, thousand of RUR</b>
1	Payroll budget (5 people, 4 months)	400
2	Contribution in kind (30 % from payroll budget)	120
3	Communication	5
4	Utility expenses	7
5	Transport expenses	3
	<b>TOTAL</b>	<b>535</b>

**Table 37.** Equipment procurement expenses

<b>№</b>	<b>Equipment</b>	<b>Cost, thousand of RUR</b>
1	Pack station	600 per 1
2	PC	30 per 1
	<b>TOTAL</b>	<b>630</b>

**Table 38.** Direct expenses on installation

<b>№</b>	<b>Expenses</b>	<b>Cost, thousand of RUR</b>
1	Payroll budget for installers, programmers and web-designers	30
2	Contribution in kind (30 % from payroll budget)	6
3	Payroll budget for employees	40
4	Contribution in kind (30 % from payroll budget)	12
	<b>TOTAL</b>	<b>88</b>

In accordance with the planned costs of commissioning, the total cost of main assets, according to summary data will be 718 thousand RUR. The average term of amortization is 7 years. Implementation of the project will require additional costs for the acquisition of intangible assets for 50 thousand. RUR. At the same time, the average term of amortization will be 3 years.

Theory of investment analysis assumes that the discount rate should include a minimum guaranteed rate of return equal to the guaranteed interest when money are uploaded in the bank account, which takes into account the degree of risk of a particular investment and the rate of inflation. It indicates the minimum acceptable return rate of investment, at which the investor

would rather choose to participate in the alternative project with a comparable degree of risk. [Carlberg, 2010]

The formula for calculating the discount rate ( $d$ ) -  $d = a + b + c$

- a - rate of return when money in the bank
- b - level of risk for this type of project
- c - set size of inflation

Data for calculation:

- Rate of return = 0%
- Level of risk of the project = 8%
- Inflation rate = 8.25%
- Total: discount rate = 16.25%.

Recouping of investments is assured by keeping the current activities related to profit-making and spending funds only on the project. With these conditions followed, monthly revenue from project activities can be expressed via equation  $R = Q_r * P_r$

- $Q_r$  is the quantity of sold services
- $P_r$  is a price for one service

In the case of reduction of revenue for the project as a result of abandoning of unprofitable activities, this reduction is reflected in the calculation with the sign "-". This project stated that investments pay off following the implementation of innovative postal services.

**Table 39.** Average monthly revenue

<b>Project implementation activities</b>	<b>Project period</b>		
	2015	2016	2017
Decrease of expenses from outdated business processes	40	43,2	46,7
Increase of profits via offering new services and products	50	54	58,3
Revenue. thousand of RUR	90	97,2	115

Cost of the current project activity refers to the costs associated with obtaining revenue from the sale of innovation. If the project activity is counting on reducing the cost of any item of

expense, these costs are taken into account with a negative value. Structure of expenses consists of manufacturing cost and administrative, commercial and non-operating expenses (excluding depreciation) related only to project activities. [Tomashev, 2006]

**Table 40.** Average monthly project expenses

Expenses	Project period		
	2015	2016	2017
Salaries	25	27	29,2
Payroll budget	7,5	8,1	8,7
Monthly cost, thousand of RUR	32,5	35,1	37,9

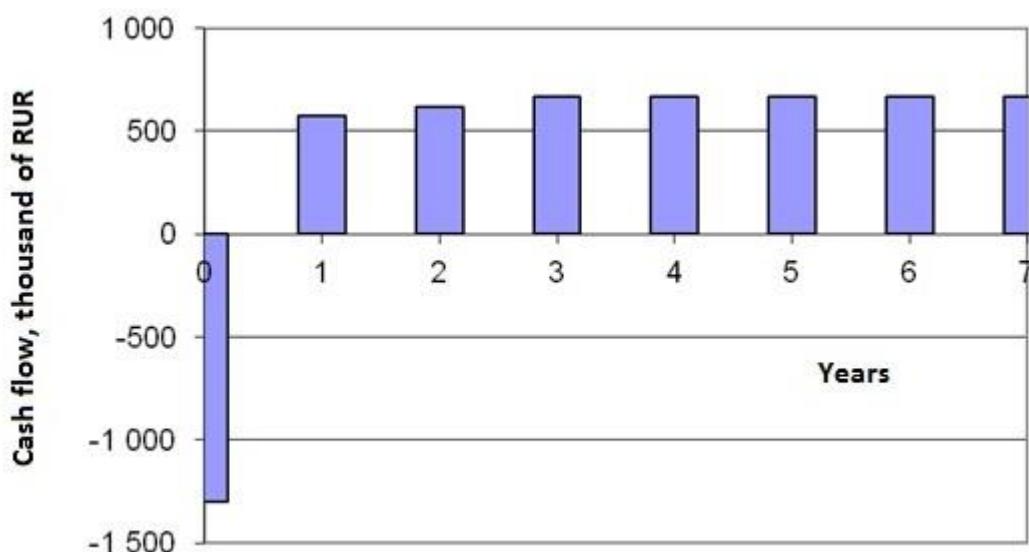
Material costs for the project development and execution activities is calculated in equation:

$$M = Q_r * K_m$$

$K_m$  is specific material costs per unit of output

Cash Flow is calculated for each project period in equation: "Cash flow" = "Volume of sales" - "Project investments" - "Current expenses" - "Deprecation of equipment"

For calculations "Project investments" are taken only for an year of investment in the project."Volume of sales" is the total annual revenue from the project."Current expenses" include the costs associated with the ongoing activities as well as the tax on profits from new activities at the rate of 20% and the percentage of the bank for the loan. [Online School, 2015]



**Graph 6.** Cash Flow

Next, author has calculated **net present value** (NPV) and **net present worth** (NPW) related to accomplishment of the project. [Carlberg, 2010]

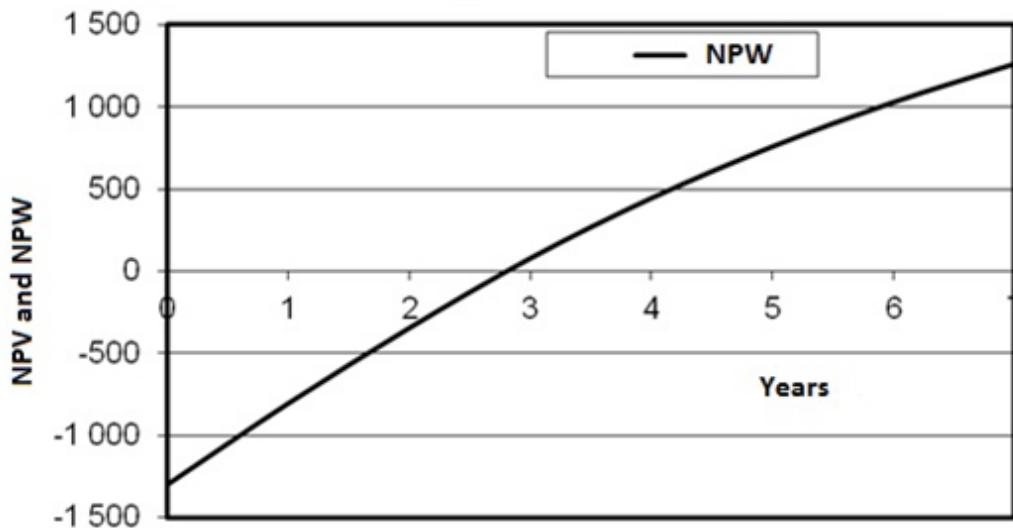
$$NPV = (P_i - K_i) / (1+d)^i.$$

$P_i$  are profits from the accomplishment for period "i",

"i" is a period from 0 (period of project development, years) to n,

d is a discount rate.

$$NPW = \sum NPV_i (i = 0 \dots n).$$



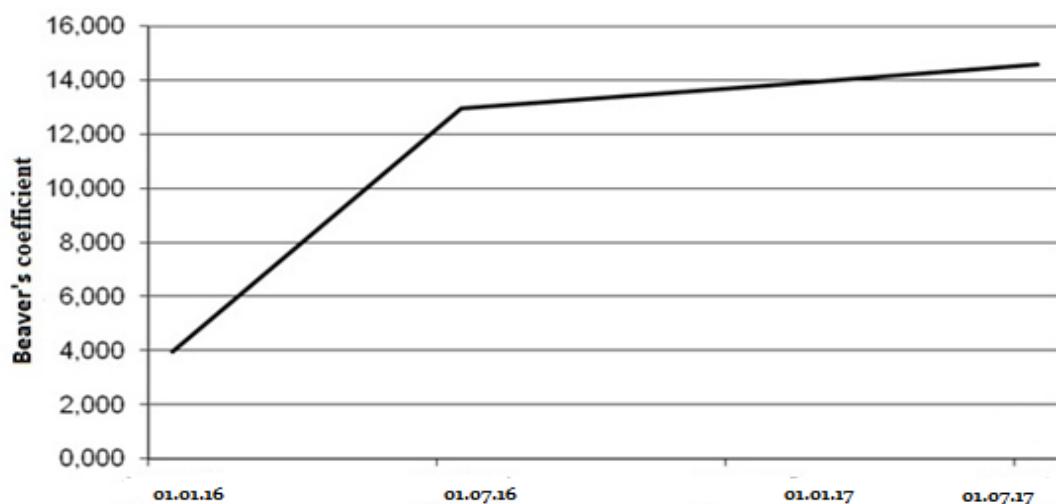
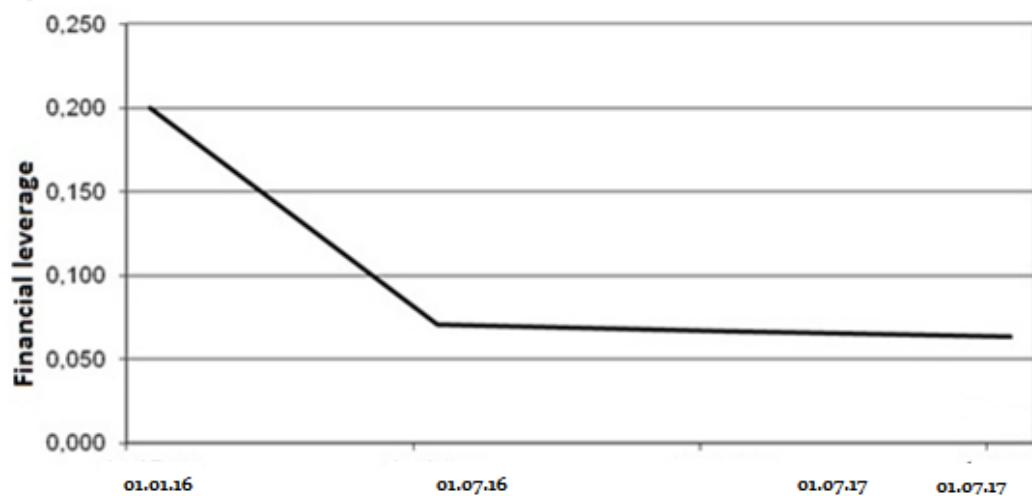
**Graph 7.** Net Present Value and Net Present Worth

For the purpose of calculating the payback period of the project it is accepted that the project pays off when the cumulative net profit of the project (taking into account the discount rate) is equal to the amount of capital investment in the project. According to NPV\NPW diagram project payback period is approximately 2.7 years unless financial resources are changed.

Additionally MS Excel program calculates the ratio of the difference between net income and depreciation and the sum of long-term and current liabilities by using W. Beaver's coefficient.

**Table 41.** Beaver coefficient

Parameter	<b>01.07.16</b>	<b>01.01.17</b>	<b>01.07.17</b>	<b>01.01.18</b>
Beaver's coefficient, B1= X6/(X4+X5)	3,941	12,955	13,765	14,568
Profitability, B2=X6/(X1+X2)	0,788	0,917	0,921	0,926
Financial leverage, B3=(X4+X5)/(X1+X2)	0,200	0,071	0,067	0,064
Burden coverage ratio, B4=(X3-X1)/(X1+X2)	-0,041	0,115	0,231	0,333
Coverage ratio, B5=X2/X5	2,463	2,625	4,456	6,232

**Graph 8.** Beaver Coefficient**Graph 9.** Financial leverage

The **internal rate of return** (IRR) index is critical discount rate at which the project is no longer to pay off. This index is determined by the selection of discount rates until the value at which the NPW curve will be a-periodically closing to the time axis on the NPV graph. Therefore, the value of IRR with the chosen financing will be equal to 50%. The IRR index shows project safety margin, which is equal to the multiplicity of the relationship of IRR to nominal value of «d». If this value is greater than "2", the project has a high safety margin, and if the value is less than "2", the reliability of the project is low. In this project, the discount rate is equal to 16.25%. Consequently, the safety margin will be 3.08.

The average return ratio (ARR) on capital is the relation of an average annual value of the profit equal to Cash Flow, to the sum of investments and is calculated by equation:

$$ARR = (\sum_{i=1}^n D_i / n) / \sum_{i=1}^n K_i. \quad [\text{Online School, 2015}]$$

"n" is the number of periods for which cash flow and the amount of capital investments are calculated. This rate shows that the effectiveness of funds invested in the project, eg, how great is the average yield per RUR of capital investments. In the current project, according to the accepted terms of project financing, ARR is 0.48.

**Table 42.** Summary

Indicator	Value
Equipment procurement expenses, thousand of RUR	630
Equipment installation expenses, thousand of RUR	88
Non-recurrent administrative expenses, thousand of RUR	535
Cost of fixed assets, thousand of RUR	718
Depreciation of fixed assets, years	7
Depreciation of intangible assets, years.	3
Project risk, %	8
Inflation of financial market	8,25
IRR, %	50
Payback period, years	2,7

Analysis shows that after the implementation of the project we should expect a favorable trend of profit growth. The values of coefficients signalize stable operation of the organization. The

increase of net income will allow to support the project adequately and will provide an opportunity to accumulate resources for further development of other innovative projects.

Summary: in this chapter author used several analysis tools in order to find out project imperatives and evaluate level of the financial sustainability of the project. Consequently the main directions of the project were defined as well as helping and hindering, costs and timeframe of the payback period of the project. The analysis shows that after the implementation of the project, favorable trend of profit growth is to be expected. Calculated value of coefficients proved stability of the project. The increase in net income will allow adequate support of the project and will provide an opportunity to accumulate resources for further implementation of other innovative projects.

## **5 DISCUSSION OF RESULTS**

The main research question was solved by constructing a project that is built on the principles of customer-oriented approach to business activity. By request, customer can be provided with great specter of additional services such as guidance in filling of custom's documents, access to Internet shop and Internet banking according to respective treaties

.  
First sub-question was assessed via literature review and it was confirmed that this politics assure the company's ability to develop and maintain close relationships with customers and to ensure ability to share customer information throughout the company so that it can be formed into actual information and knowledge.

Second sub-question was studied by utilizing building and analysis business model canvas. This part revealed that untenable high expenses on old services and products, low level of implemented modern technologies and low level of computerization, as well as internal resistance are still the main hindering forces that oppose innovative development of Russian post.

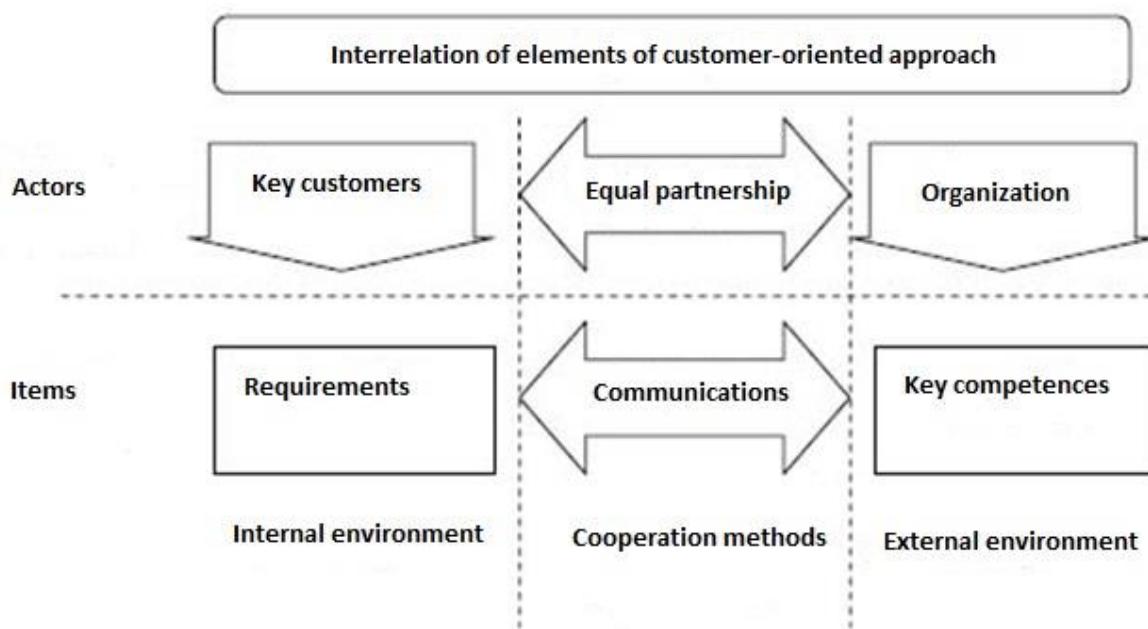
Third sub-question was answered through the analysis of current customer requirements and related assuring characteristics aided by analysis of international experience.

Fourth sub-question that concerned financial stability was dealt with tools for managing financial aspects of crisis management and according to the calculations, the payback period of proposed project is 2 years and 7 months.

Theoretical review confirmed that in the times of crisis companies tend to step away from standard customer-centered approach and start focusing on a customer-oriented approach instead because it allows not only to decrease dependency on the changes of customers' preferences and appetite, but also to improve the whole strategy of a company focusing on long-term relations and development instead of momentary marginal profits.

It was found that customer-oriented approach helps to reflect the place clients' interests in the priorities of the company and characterizes the nature of the whole company. Therefore, it is essential to use the theoretical tools of research management systems while constructing a successful customer-oriented system. Building of a such system influences each and every

managerial and administrative subsystem that constitutes the control a company, such as staff management, risk management, structure management, process management, product lifecycle management and others.



**Graph 10.** Proposed framework of an innovative approach

Regarding current pricing strategy, author found out that its main goal is preservation and development of the postal network build by Russian post company. In addition it is aimed on improving quality of services and communications, preservation of market share and assuring the competitiveness and profitability.

A comprehensive solution of this task and a reliable solution of problems is going to include the following measures:

- ✓ Strengthening resource and technical fundaments, primarily via the resumption of construction of new and reconstruction of existing logistical and customer-communication mechanisms.
- ✓ Organization of a system for collection and processing of operational and technological information, covering all levels of corporate governance, network of branches transportation system via building a system of electronic terminal facilities in post offices combined into a single information technology network.

- ✓ Improvement of a governance system through the implementation of marketing activities in postal enterprises. Their central function will be the study of the consumer market which will help to construct various choices of flexible tariff policy, improve the methodology of pricing of postal services, develop new higher-quality postal products and services and expand the range of additional services.

All these actions are ultimately aimed on the increase of effectiveness of pricing strategy and on the complete and high quality fulfillment of customer requirements.

Tools of financial analysis have promised successful and adequate level of recoulement, operating expenses were calculated and the terms of their compensation is 2 years and 7 months. Nevertheless, according to negative market conditions due to financial and economical crisis in Russia, author requires researchers to assess and study level of financial stability of the whole company as well.

Limitations of this research are related to the fact that author was not hired by Russian Post company to conduct this research so the most sensitive and accurate data that was available for top-executives, could not be assessed. There must be an understanding as well that the basic data for the research that was collected via benchmarking study of product portfolio tends to get lose its validity quickly because of bias and continuous innovation processes. Moreover, in the age of uncertainty, perturbations in the international and local market constantly create new factors to be taken into account and influence customer requirements and decision making imperatives.

As for the next potential research author can suggest seeking for an opportunity to utilize additional methods of matrix-integral analysis of project imperatives and customer requirements to product characteristics: MCC matrix, ADL matrix, GE matrix, Ansoff matrix, McDonald matrix, et cetera. It will be also beneficial to utilize EU-approved methods of evaluating project's financial stability and payback period of investments in order to justify continuous internationalization.

As for additional possible goals for computerization and automatization in the following 3-5 years after implementation of the project, author can suggest the following:

- ✓ Integrate automation of administrative, accounting and taxation processes in combination with rejection of fragmented and outdated systems, into unified accounting system.
- ✓ Extend analytical support of company's management. Launch the implementation of a single repository and data marts, introduce OLAP - systems.
- ✓ Expand the system of interaction with customers through delivering e-mails throughout Russia and CIS and e-based interaction with corporate customers.

In addition author proposes development of database of postal services for Russian Post where (by request) customer can open an account to access postal services via PC or info table in postal office and order delivery of postal products which will be given private identification code. Control over the system is proposed to be based on the compilation of company's new standards for informational service and internal arbitration aimed on neutralization of hindering forces.

## **6 CONCLUSION**

Following continuous formalization of Russian society, businesses acquire new possibilities for improvement of product/service portfolio and consequent improvement of quality. This thesis has proposed undertakings which reflect researches aimed on solving problems with provision of services and development of communications.

Author hopes that used methods and results will serve as additional basis for mutually beneficial and open exchange of data and innovations between companies in Russia and Finland. The necessity of accurate and correct assessment of the Russian market of communications (of both low-tech and high-tech sections) will continue to be essential requirement for successful business activity in this industry and related sections of market which is especially important for foreign companies and Finnish companies as well, especially for SMEs which conduct joint cooperation projects with Russian SMEs.

In order maintain the effectiveness of implementation of the results, following measures should be considered vital for any customer-oriented enterprise:

- ✓ Continuous staff training aimed on achieving maximum possible effectiveness during each stage of production.
- ✓ Unconditional adherence to principles of customer-oriented approach in order to achieve maximum customer satisfaction.
- ✓ Development of technical support for a quicker adaptation of a project to the structure of the company and for eliminating problems.
- ✓ Monitoring the financial sustainability of the project to determine the prices level of expenditure required for the project and the rate of return.
- ✓ Conduction of benchmarking studies of product portfolios of other foreign post companies.
- ✓ Use of independent expert assessment of emerging problems in order to obtain maximum detailed analysis and feedback.

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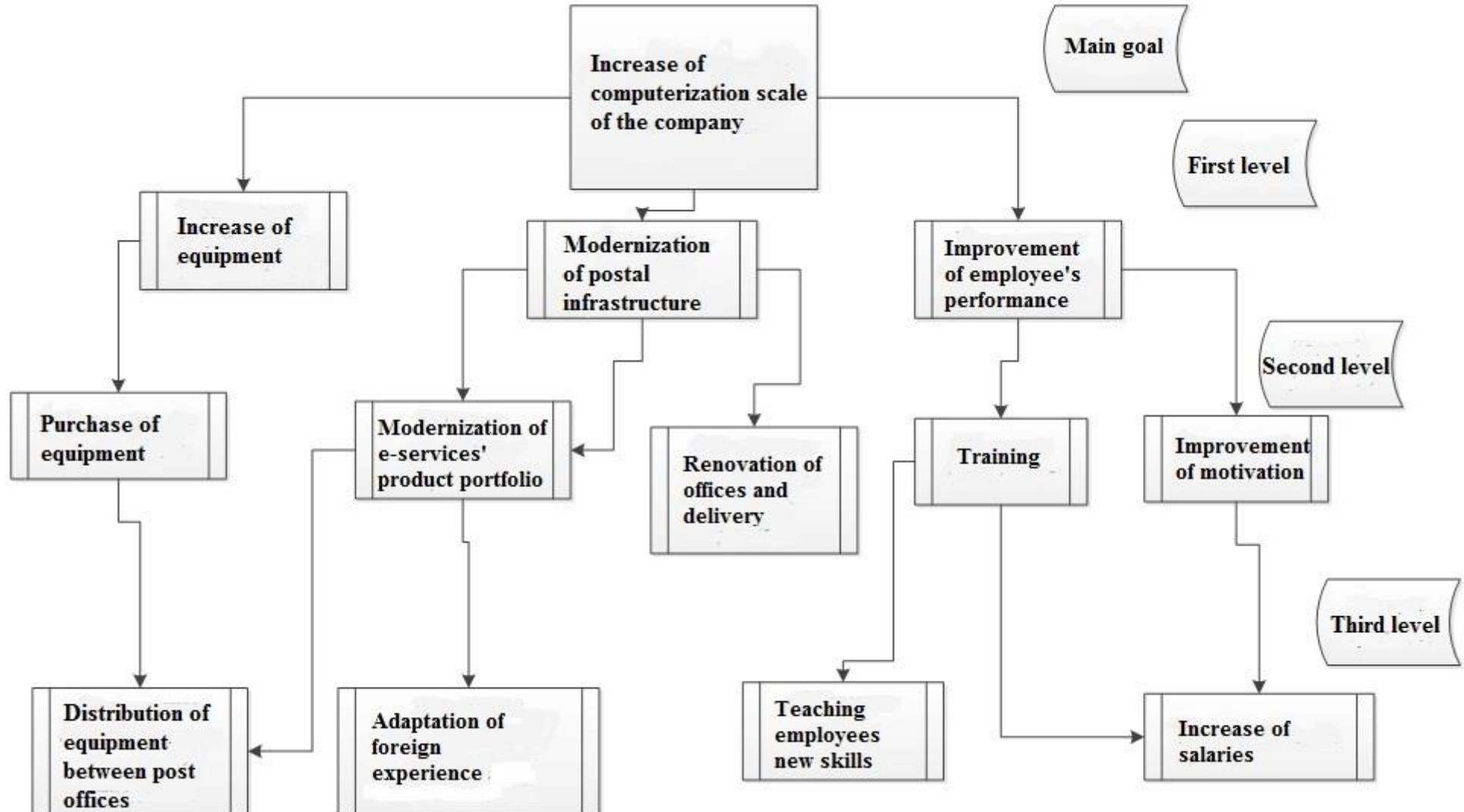
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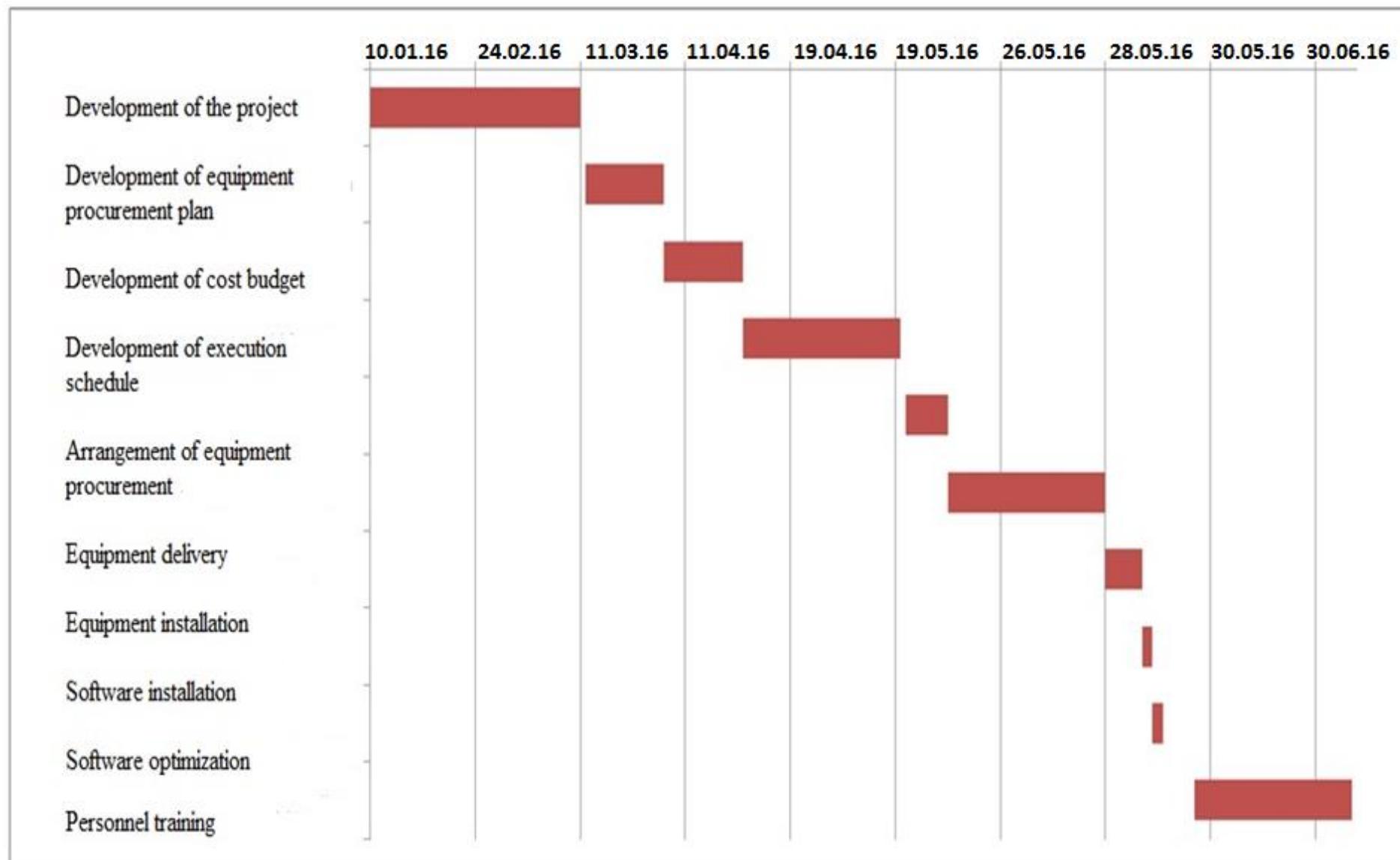
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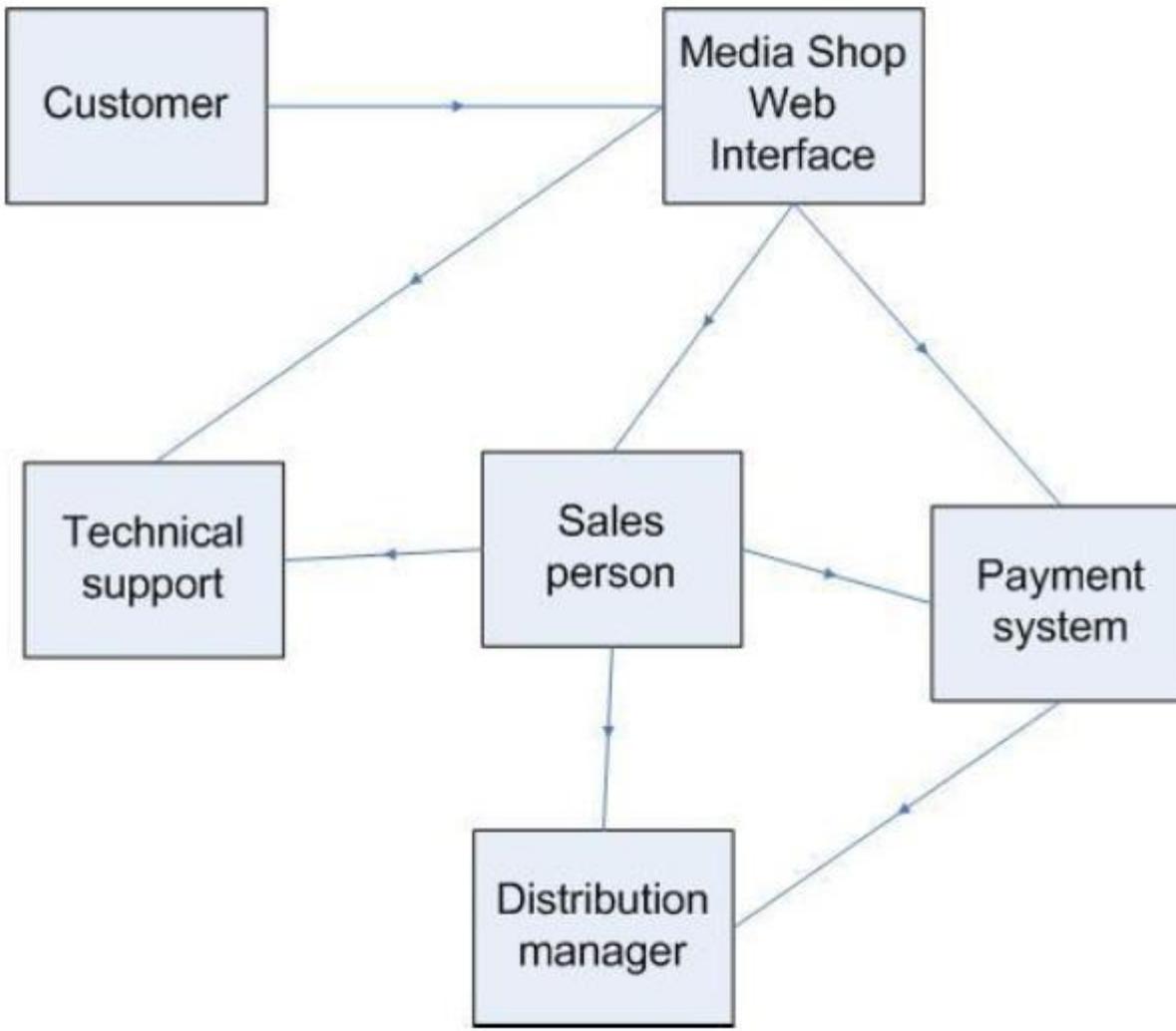
## APPENDIX



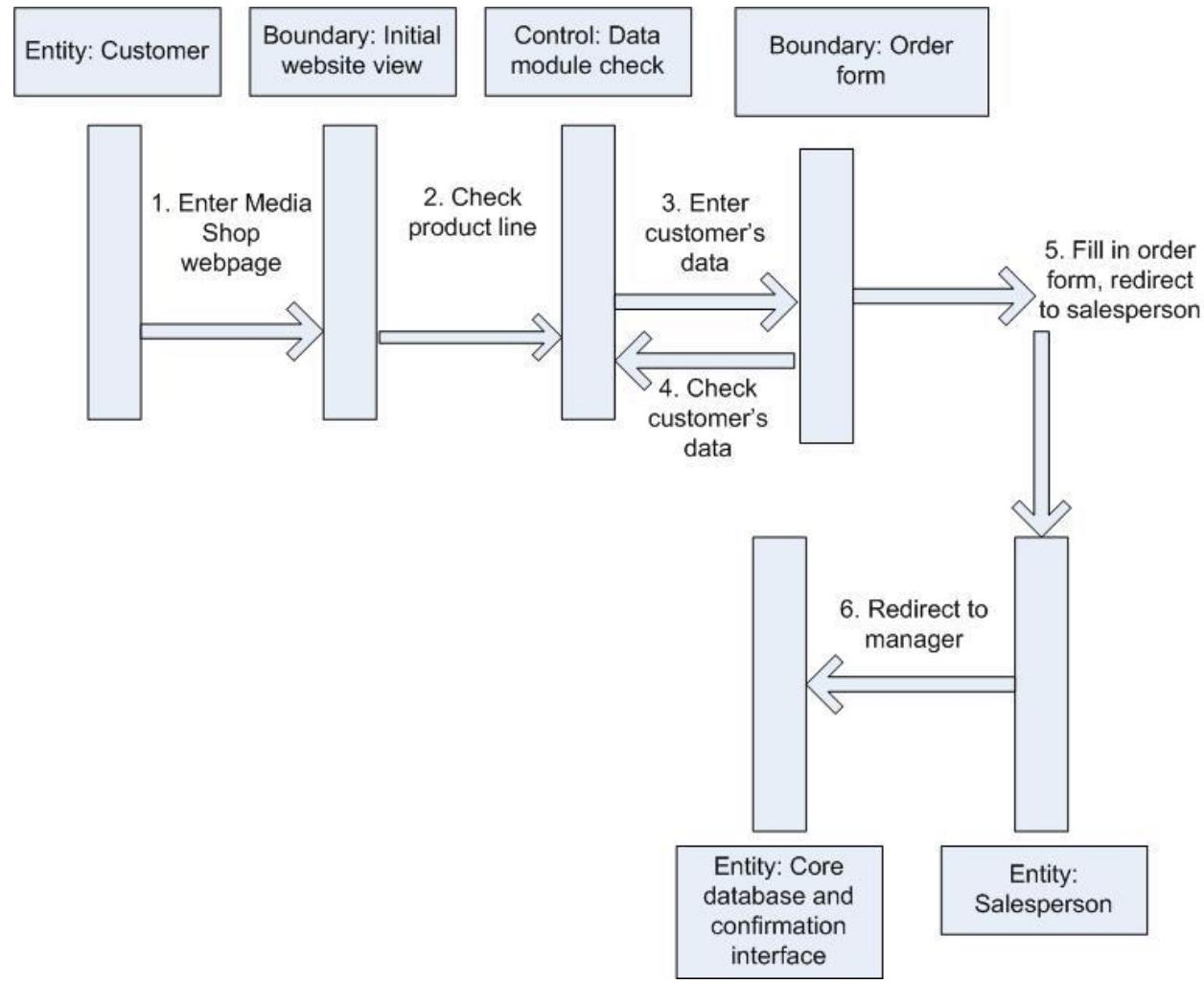
Graph 11. Tree of objectives



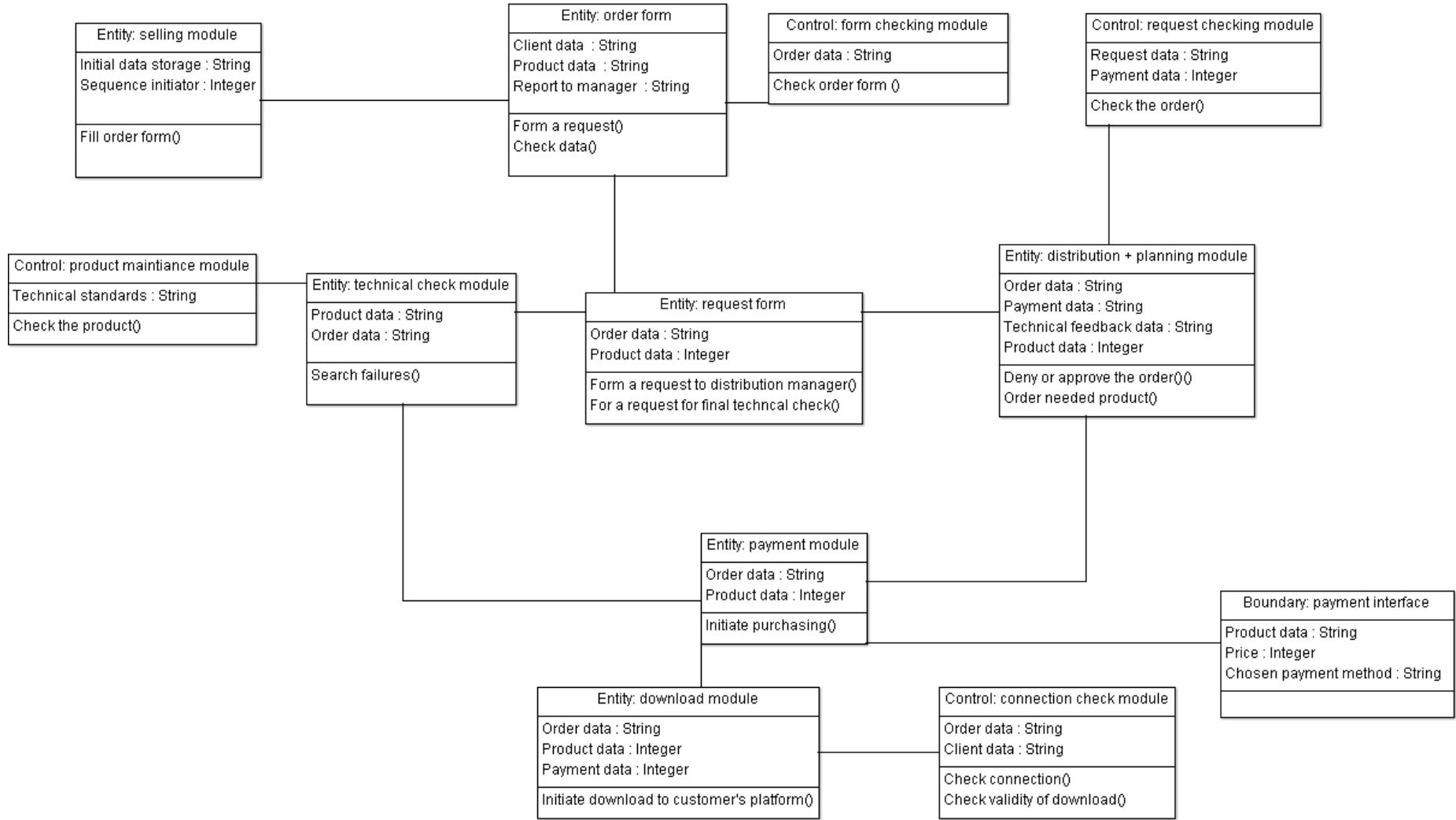
**Graph 12.**Gantt Diagram



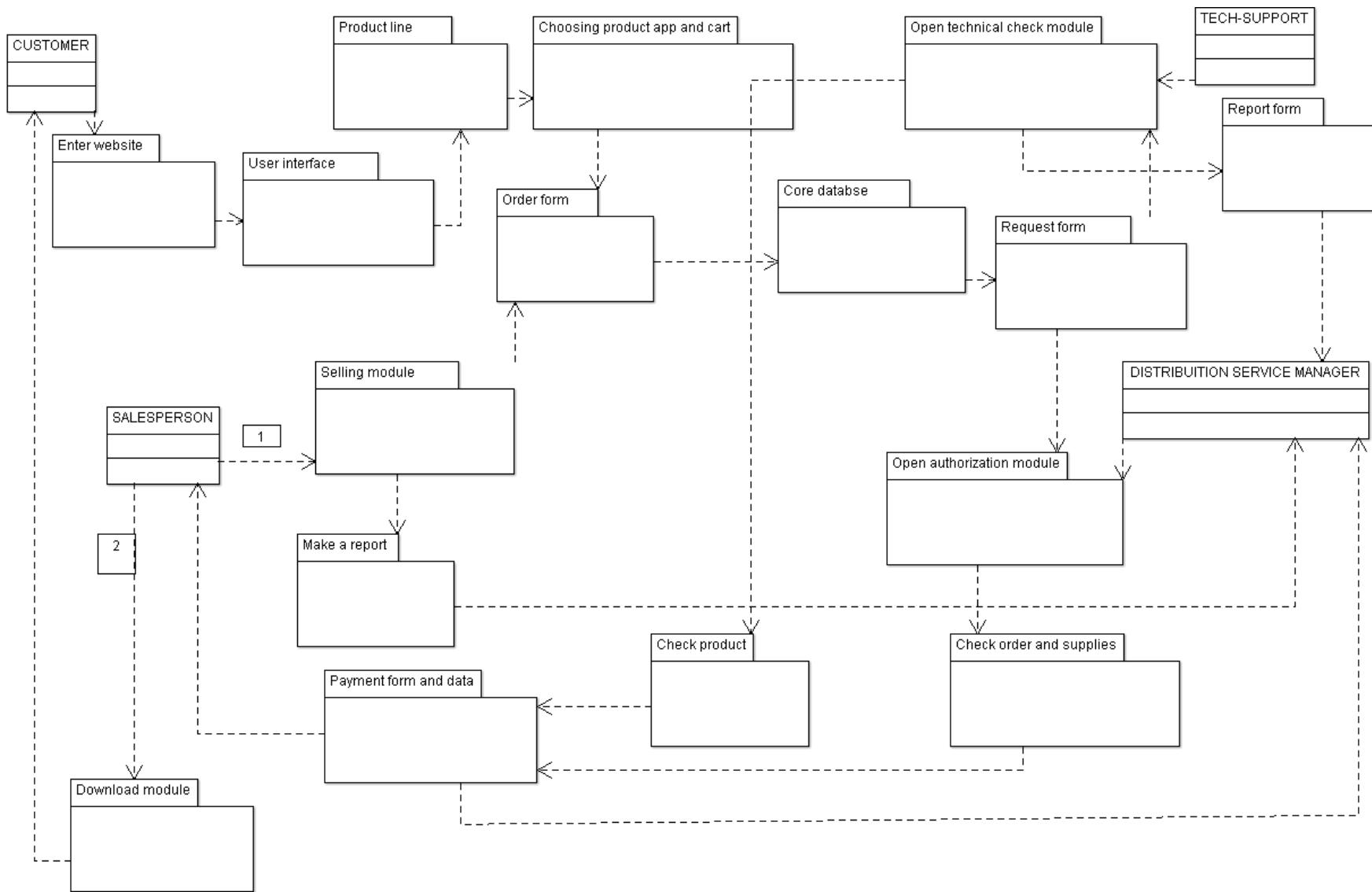
**Graph 13.** Logical view diagram. [Dzenov, 2013]



**Graph 14.** Sequence diagram. [Dzenov, 2013]



Graph 15. Activity Diagram. [Dzenov, 2013]



**Graph 16.** Server Diagram. [Dzenov, 2013]